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TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1935.

No. 23

THE BASSICK MANUFACTURING COMPANY,
PETITIONER,

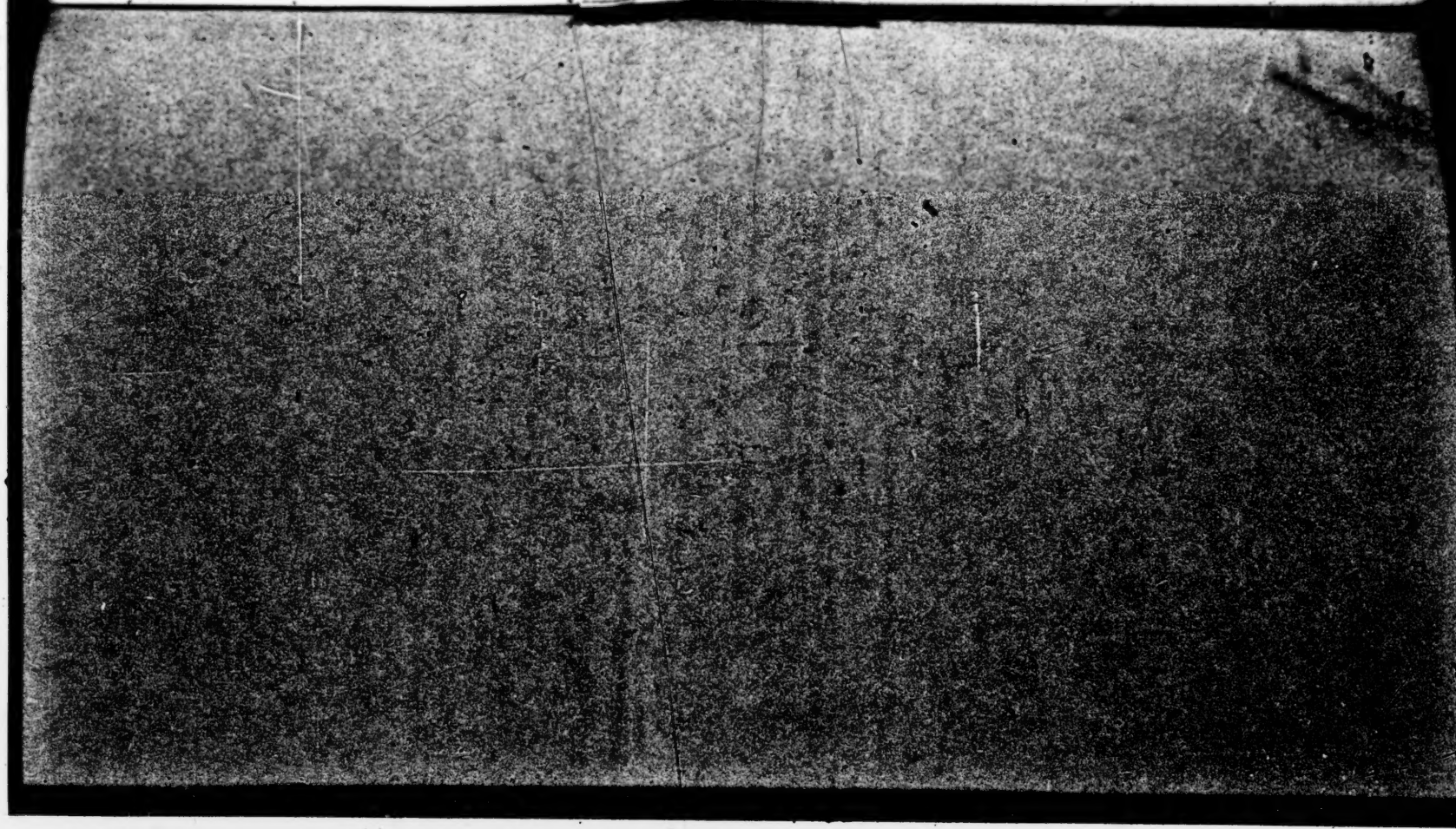
vs.

THE R. M. HOLLINGSHEAD COMPANY.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SIXTH CIRCUIT.

PETITION FOR CERTIORARI FILED APRIL 13, 1935.

CERTIORARI GRANTED MAY 20, 1935.



SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1934

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THE BASSICK MANUFACTURING COMPANY,
PETITIONER,

vs.

THE R. M. HOLLINGSHEAD COMPANY

ON PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SIXTH CIRCUIT

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[fol. 1].

IN UNITED STATES DISTRICT COURT, WESTERN DISTRICT OF TENNESSEE, WESTERN DIVISION

In Equity

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE R. M. HOLLINGSHEAD COMPANY, Defendant

BILL OF COMPLAINT—Filed Aug. 16, 1926

Plaintiff, for complaint against defendant, alleges as follows:

(1) Plaintiff, The Bassick Manufacturing Company, is a corporation organized and existing under and by virtue of the laws of the State of Delaware, a citizen of Delaware, having its principal place of business at Chicago, and a resident of Chicago, in the County of Cook, and State of Illinois.

(2) Defendant, The R. M. Hollingshead Company, is a corporation organized and existing under and by virtue of the laws of the State of New Jersey, having a regular and established place of business at Memphis, Shelby County, Tennessee, within the Western District of Tennessee, Western Division, within which District and Division it has committed acts of infringement of plaintiff's patent, of which complaint is made herein.

(3) Arthur V. Gullborg, a citizen of the Untied States, being prior to December 21, 1918, the original, first and sole inventor of certain new and useful improvements in Lubricating Means, lawfully filed and prosecuted an application for United States patent therefor, and, having complied in all respects with the statutes and the rules of the Patent Office, United States patent No. 1,307,734 was lawfully granted and issued pursuant to said applicant on June 24, 1919.

(4) Said invention of Arthur V. Gullborg was new, useful, not known or used by others in this country before

his invention, not patented or described in any printed publications anywhere before his invention or more than two years prior to his application, not in public use or on sale in this country for more than two years prior to his application, not patented in any foreign country by him [fol. 2] or his legal representatives on applications filed more than one year before his said application in this country, and not abandoned. Said patent is now in full force and is hereby proffered and ready to be produced before the Court.

(5) Prior to the commencement of this suit, plaintiff became, by lawful assignments, duly recorded in the United States Patent Office, ond now is the sole owner of said United States Patent No. 1,307,734, and of all rights thereunder and of all rights of action for infringement thereof.

(6) The invention patented by said patent No. 1,307,734 is of great utility and is of great value to plaintiff and of great benefit to the public. Plaintiff and its predecessors have very extensively sold and introduced into public use devices in which said patented invention is embodied, and the public and manufacturers have demanded and purchased from plaintiff and its predecessors such devices embodying said inventions in very large and in very rapidly increasing quantities.

(7) Plaintiff and its predecessors have complied with the United States statutes relating to marking patented devices sold by them.

(8) The public has, in general, acknowledged the validity of the aforesaid patent No. 1,307,734, and has respected plaintiff's rights therein and thereunder.

(9) Defendant, in violation of plaintiff's rights under said patent No. 1,307,734, and without any authority since the issuance of said patent, and within six years before the commencement of this suit within the District aforesaid and elsewhere in the United States, has threatened to infringe and has infringed said patent No. 1,307,734 by using and selling lubricating apparatus embodying said patented invention, and by using and selling devices designed and intended for use in apparatus embodying said patented invention. Defendant threatens to continue to commit acts in violation of plaintiff's rights and in infringement of said patent, whereby plaintiff has been and

will be greatly and irreparably damaged, and whereby defendant is about to obtain large profits, which in equity will belong to plaintiff, the amount of which damages and profits plaintiff cannot ascertain except by an accounting.

Plaintiff therefore prays:

(a) That defendant be required to answer this Bill of Complaint, but not under oath, answer under oath being hereby expressly waived.

(b) That the court grant a temporary restraining order, [fol. 3] a preliminary injunction pending his suit, and a perpetual injunction restraining the defendant, its agents, employes, associates and confederates, enjoining them from making, using or vending the combinations patented in said patent or any of the parts thereof or any other devices embodying the inventions described and claimed in said patent, or adapted to be used in systems or combinations embodying the same, and from offering or advertising so to do, and from aiding or abetting or in any way contributing to the infringement of said patent.

(c) That this cause be referred to a Master to make and report an account of damages and profits, accruing from defendant's infringement of said patent, and that plaintiff have judgment for the damages and profits so found and for the costs of this suit.

(d) That plaintiff have such other and further relief as equity may require.

The Bassick Manufacturing Company, by J. E. Otis, Jr., Vice-President. Lyman A. Williams, Williams, Bradbury, McCaleb & Hinkle, Solicitors for Plaintiff.

Duly sworn to by J. E. Otis, Jr. Jurat omitted in printing.

[fol. 4] IN UNITED STATES DISTRICT COURT

ANSWER—Filed Sept. 7, 1926

To the Honorable Judges of the above entitled court:

The answer of the above entitled defendant to the Bill of Complaint exhibited against it by the above named plaintiff.

1. Defendant has no information as to whether or not plaintiff is incorporated, organized and existing under and by virtue of the laws of the State of Delaware, whether it is a citizen of Delaware, whether it has its principal place of business at Chicago, and whether it is a resident of Chicago, County of Cook, in the State of Illinois, and therefore denies the same and leaves plaintiff to make full proof thereof.

2. Defendant admits the averments of its existence and organization under the laws of the State of New Jersey, and as to its having a regular and established place of business at Memphis, Shelby County, Tennessee.

3. Defendant denies having committed any act of infringement complained of either within the Western District of Tennessee, Western Division, or elsewhere.

4. Defendant admits that Arthur V. Gullborg on December 21, 1918 filed application for Letters Patent in the United States on certain alleged new and useful improvements in Lubricating Means, and that Letters Patent of the United States numbered 1,307,734, were granted on said application on June 24, 1919; but defendant denies that at the date of filing said application said Arthur V. Gullborg was a citizen of the United States, and denies each and every other allegation contained in the third paragraph of the bill, respecting the inventorship of Arthur V. Gullborg, and denies particularly that prior to the filing of said application for letters patent he, said Arthur V. Gullborg, was the original, first and sole inventor of the subject matter disclosed and claimed therein, denies that said application was lawfully filed and prosecuted by him and that the statutes and rules of the Patent Office were complied with in the filing and prosecution of said application and issuance of Letters Patent thereon, and leaves plaintiff to make full proof thereof.

5. Defendant denies each and every allegation contained in the fourth paragraph of the Bill of Complaint and particularly denies that said alleged invention or any part thereof, was in fact an invention, that the subject matter thereof was new or useful or not known or used in the country before the alleged invention thereof by said Arthur V. Gullborg, denies that the same was not patented or [fol. 5] described in any printed publication anywhere be-

fore his alleged invention thereof, or more than two years prior to his said application, denies that the same was not in public use or on sale in this country for more than two years prior to said application, or not patented in any country by him or his legal representatives on an application filed more than one year before his said application in this country, and not abandoned, and therefore denies that said patent is now in full force.

6. Defendant is not advised as to whether or not plaintiff is now the sole owner of said letters patent of the United States No. 1,307,734, and of all rights therein and all rights of action for infringment thereof, as alleged, and therefore denies the same and leaves plaintiff to make full proof thereof.

7. Defendant denies each and every allegation contained in the sixth paragraph of the bill, and particularly denies that the alleged invention patented by said letters patent No. 1,307,734, is of great utility and of great value to the plaintiff and of great benefit to the public; denies that plaintiff and its predecessors have extensively sold and introduced into public use devices embodying the same, and denies that there has been a very large and rapidly increasing demand therefor.

8. Defendant denies that plaintiff and its predecessors have marked all devices embodying said alleged invention in full compliance with the statutes of the United States, as alleged in the seventh paragraph of the bill.

9. Defendant denies each and every allegation contained in paragraph eight of the bill, and particularly denies that the public has generally acknowledged the validity of said letters patent, or respected or recognized any rights of plaintiff therein and thereunder, and avers the contrary to be true and that said letters patent have been generally regarded as invalid and inoperative and without legal effect.

10. Defendant denies each and every allegation of the ninth paragraph of the bill and particularly denies that it has violated any right secured to plaintiff under said letters patent No. 1,307.734, at any time or at any place, denies having infringed said letters patent, denies any intention or threats of violation of any right of plaintiff under

said letters patent, denies that plaintiff has been or will be damaged as alleged, and denies that defendant is about to obtain any profits accruing in equity to the plaintiff.

11. And in further answer to the Bill of Complaint, and [fol. 6] as an additional and separate defense in its behalf, defendant alleges that, for the purpose of deceiving the public, the description and specification filed by the patentee in the Patent Office as a part of the application on which patent No. 1,307,734 was issued, was made to contain, in certain respects, less than the whole truth relative to the alleged invention, and in other respects was made to contain irrelevant matter, which in no way contributed in producing the desired effect; wherefore, the said letters patent are void and of no legal effect.

12. As an additional and separate defense in its behalf, defendant alleges that Arthur V. Gullborg was not the original, first and sole inventor of the subject-matter disclosed and claimed in said letters patent, but that he surreptitiously or unjustly obtained said letters patent, for that which was in fact invented by others, who were using reasonable diligence in adapting and perfecting the same, wherefore, said letters patent are void and are of no legal effect.

13. And as an additional and separate defense in its behalf, defendant alleges that the subject-matter disclosed and claimed in said letters patent, or all material and substantial parts thereof, had been patented or described in printed publications long prior to the supposed invention or discovery by the said Arthur V. Gullborg, or for more than two years prior to his application for Letters Patent therefor, particularly in the specifications, drawings and claims of the below identified letters patent, and that therefore, said Letters Patent sued upon are null and void:

United States Patents

8,251, Richardson, July 29, 1851:
Re. 10,064, Skinner, Mar. 21, 1882;
Re. 14,667, Winkley, June 10, 1919;
Re. 15,503, Piquerez, Dec. 5, 1922;
149,728, Diehl et al., April 14, 1874;
165,391, Warker, July 6, 1875;

182,675, Johnson, Sept. 26, 1876;
199,312, Perkins, Jan. 15, 1878;
241,500, Marks et al., May 17, 1881;
242,141, Laskey et al., May 31, 1881;
242,564, Sholder, June 7, 1881;
249,194, Marks, Nov. 8, 1881;
263,415, Lightburne, Aug. 29, 1882;
308,843, Kelsey, Dec. 2, 1884;
383,360, Kiefer, May 22, 1888;
[fol. 7] 418,225, Rice, Dec. 31, 1889;
456,295, Stedman, July 21, 1891;
458,636, Meilink et al., Sept. 1, 1891;
537,439, Conley, Apr. 16, 1895;
605,238, Sutfin, June 7, 1898;
610,359, Lees, Sept. 6, 1898;
615,623, King, Dec. 6, 1898;
617,591, Miller, Jan. 10, 1899;
623,135, Cordeau, Apr. 18, 1899;
667,096, Lippincott, Jan. 29, 1901;
679,005, Prouty, July 23, 1901;
692,795, Moyle, Feb. 4, 1902;
739,624, Traver, Sept. 22, 1903;
793,869, Anderson, July 4, 1905;
798,441, Nelson, Aug. 29, 1905;
807,985, Alden, Dec. 19, 1905;
810,959, Marmon, Jan. 30, 1906;
838,219, Stapley, Dec. 11, 1906;
863,878, Reimund, Aug. 20, 1907;
864,079, Coleman, Aug. 20, 1907;
919,743, Mason, Apr. 27, 1909;
921,691, Friday, May 18, 1909;
928,797, Rohrbacker, July 20, 1909;
937,682, MacClyment, Oct. 19, 1909;
939,036, Koper, Nov. 2, 1909;
950,263, Harpster, Feb. 22, 1910;
951,889, Teuer, Mar. 15, 1910;
976,787, Donnelly, Nov. 22, 1910;
983,095, Townsend, Jan. 31, 1911;
988,422, Wilson, Apr. 4, 1911;
1,017,654, De Grey, Feb. 20, 1912;
1,020,167, Vesey, Mar. 12, 1912;
1,027,588, Brown, May 28, 1912;
1,042,627, Watson, Oct. 29, 1912;

1,051,805, Danberg, Jan. 28, 1913;
1,117,762, Barcus, Nov. 17, 1914;
1,141,101, Brown, June 1, 1915;
1,150,420, Davis et al., Aug. 17, 1915;
1,166,643, Wayne, Jan. 4, 1916;
1,170,752, Hodges, Feb. 8, 1916;
1,189,191, Charroin, June 27, 1916;
1,194,793, Styers, Aug. 15, 1916;
1,201,414, Winkley, Oct. 17, 1916;
1,205,686, Uhl, Nov. 21, 1916;
1,207,739, Frazier et al., Dec. 12, 1916;
1,213,518, McEwen, Jan. 23, 1917;
1,244,925, Wahl, Oct. 30, 1917;
1,248,526, Morse, Dec. 4, 1917;
[fol. 8] 1,249,142, Lotz, Dec. 4, 1917;
1,253,309, Ulleland, Jan. 15, 1918;
1,276,108, Piquerez, Aug. 20, 1918;
1,304,576, Kraft, May 27, 1919;
1,304,814, Schweinert, May 27, 1919;
1,364,147, Spahr, Jan. 4, 1921;
1,367,250, DuPont, Feb. 15, 1921;
1,494,652, Wallace, May 20, 1924.

British Patents

3,028, Seng, 1915;
26,134, Sharpe, 1912;
21,893, Alley, 1906;
121,863, Pitkin, 1919;
172,763, Sokal, 1921.

German Patent

6,118, Better, Nov. 10, 1878.

14. And as an additional and separate defense in its behalf, defendant alleges that said Arthur V. Gullborg was not the original and first inventor or discoverer of any material and substantial part of the things patented in said letters patent, but that the same, and all material and substantial parts thereof, were previously devised by the several applicants for the letters patents identified in the next preceding paragraph herein, wherefore said letters patent, are void and of no legal effect.

15. And as an additional and separate defense in its behalf, defendant alleges that the things patented in and by said letters patent were in public use and on sale in this country for more than two years before the application of Arthur V. Gullborg, therefor, or prior to his alleged invention thereof, by the following named persons at the places indicated, to wit:

Wilson Instrument and Specialty Company at Passaic, N. J.
Clarence Wilson, 21 W. 9th Street, New York, N. Y.
Albert K. Bush, 382 Paulsion Avenue, at Passaic, N. J.
William P. Welsh, 134 Center Street, Nutley, N. J.
Chester C. Henry, Summitt, N. J.
O. K. Specialty Co., Newark, N. J.
John Swenson, 17 Madison Avenue, Clifton, N. J.
Auto Car Co., Ardmore, Pa.
White Motor Co., Cleveland, Ohio.

[fol. 9] wherefore, said letters patent are void and of no legal effect.

16. And as an additional and separate defense in its behalf, defendant alleges that the things patented in and by said letters patent, did not, at the date of said letters patent, constitute an invention patentable under the law, but were obvious aggregations of old and well known mechanical devices and expedients arranged for operation in an obvious and customary manner, and devoid of invention whereby letters patent are invalid and without legal effect.

17. Defendant further avers on information and belief that the invention of said Gullborg patent was known to and used by other persons in this and foreign countries and patented and described in other letters patent for this and other countries the prior uses and means of which persons and the numbers and dates of which letters patent are at present unknown to defendant and which when ascertained defendant prays leave to insert by amendment in its answer.

18. Defendant, further answering, avers that the claims of the letters patent sued upon cannot be construed to cover or include anything ever made, sold or used by this defendant, and that they are invalid and ineffectual for such purpose, not only in view of the state of the prior art, but also

because of the cancellations, of the declarations amounting to disclaimers, and of the express limitations and restrictions, made or assented to by said patentee in his application for said letters patent, and, moreover, made or assented to in consequence of repeated rejections and objections by the Patent Office which were acquiesced in by the applicant as a prerequisite to obtaining the allowance of his said letters patent as finally issued, all as disclosed by the file-wrapper of said letters patent, ready in court to be produced.

19. Defendant further answering says that the devices which have been sold by it, alleged to be infringements, of the Gullborg patent aforesaid, were sold for replacement and repair purposes as defendant has been advised that it had and still has the lawful right to do, defendant having in no instance furnished the fixed nipples which are a permanent part of an automobile chassis, and that defendant has therefore not sold any of said articles for purposes of a complete, new installation.

20. Defendant further avers that in the conduct of its business it has acted in conformity with the orders and decrees heretofore entered by Judge Hickenlooper in a cause now pending in the District Court of the United [fol. 10] States, Southern District of Ohio, Western Division, between this plaintiff and the Larkin Automotive Parts Company, entitled In Equity No. 74, particularly as respects an order of said court, filed July 29, 1926, in the above entitled cause and entered nunc pro tunc as of date of October 14, 1924.

All of which matters and things this defendant is ready and willing to aver, maintain and prove, as this Honorable Court shall direct, and therefore prays that the Bill of Complaint herein may be dismissed with its reasonable costs, charges and disbursements in this behalf most wrongfully sustained, and to be taxed.

The R. M. Hollingshead Co., by R. M. Bagley, Vice President. R. M. Bagley, Secretary. (Seal.) Brown & Waldauer, Solicitors and of Counsel for Defendant. Leonard L. Kalish, E. Hayward Fairbanks, of Counsel for Defendant.

Duly sworn to by R. M. Bagley. Jurat omitted in printing.

[fol. 11] IN UNITED STATES DISTRICT COURT

AMENDED BILL OF COMPLAINT—Filed Oct. 29, 1926

Plaintiff, for complaint against defendant, alleges as follows:

(1) Plaintiff, The Bassick Manufacturing Company, is a corporation organized and existing under and by virtue of the laws of the State of Delaware, a citizen of Delaware, having its principal place of business at, and being a resident of, Chicago, in the County of Cook, and State of Illinois.

(2) Defendant, The R. M. Hollingshead Company, is a corporation organized and existing under and by virtue of the laws of the State of New Jersey, having a regular and established place of business at Memphis, Shelby County, Tennessee, within the Western District of Tennessee, Western Division, within which District and Division it has committed acts of infringement of plaintiff's patents, of which complaint is made herein.

(3) Arthur V. Gullborg, a citizen of the United States, being, prior to December 21, 1918, the original, first and sole inventor of certain new and useful improvements in Lubricating Means, lawfully filed and prosecuted an application for United States patent therefor, and, having complied in all respects with the statutes and the rules of the Patent Office, United States patent No. 1,307,734 was lawfully granted and issued pursuant to said application on June 24, 1919.

(4) Oscar Zerk, a citizen of the United States, being, prior to November 21, 1922, the original, first and sole inventor of certain new and useful improvements in Lubricating Apparatus, lawfully filed and prosecuted an application for United States patent therefor, and having complied in all respects with the statutes and the rules of the patent office, United States patent No. 1,475,980 was lawfully granted and issued pursuant to said application on December 4, 1923.

(5) Said inventions of Arthur V. Gullborg and Oscar Zerk were new, useful, not known or used by others in this country before their respective inventions, not patented or de-

scribed in any printed publications anywhere before their respective inventions, or more than two years prior to their respective applications, (not in public use prior to their respective applications), not patented in any foreign country by them or their legal representatives on applications filed more than one year before their said applications in this country, and not abandoned. Said patents are now in full [fol. 12] force and are hereby proffered and ready to be produced before the Court.

(6) Prior to the commencement of this suit, plaintiff became, by lawful assignments duly recorded in the United States Patent Office, and now is, the sole owner of said United States Patents Nos. 1,307,734 and 1,475,980 and of all rights thereunder and of all rights of action for infringement thereof.

(7) The inventions patented by said patents Nos. 1,307,734 and 1,475,980 are of great utility and are of great value to plaintiff and of great benefit to the public. Plaintiff and its predeecessors have very extensively sold and introduced into public use devices in which said patented inventions are embodied, and the public and manufacturers have demanded and purchased from plaintiff and its predecessors such services embodying said inventions in very large and in very rapidly increasing quantities.

(8) Plaintiff and its predecessors have marked all devices embodying said inventions, made or sold by them, in full compliance with the United States statutes.

(9) The public has, in general acknowledged the validity of the aforesaid patents Nos. 1,307,734 and 1,475,980, and has respected plaintiff's rights therein and thereunder.

(10) Defendant, in violation of plaintiff's rights under said patents Nos. 1,307,734 and 1,475,890 and without any authority since the issuance of said patents, and within six years before the commencement of this suit within the Western District of Tennessee, Western Division, and elsewhere in the United States, has infringed said patents Nos. 1,307,734 and 1,475,980 by using and selling lubricating apparatus embodying said patented inventions, and by using and selling devices designed and intended for use in apparatus embodying said patented inventions. Defendant

threatens to continue to commit acts in violation of plaintiff's rights and in infringement of said patents, whereby plaintiff has been and will be greatly and irreparably damaged, and whereby defendant is about to obtain large profits, which in equity will belong to plaintiff, the amount of which damages and profits plaintiff cannot ascertain except by an accounting.

Plaintiff therefore prays:

(a) That defendant be required to answer this amended Bill of Complaint, but not under oath, answer under oath being hereby expressly waived.

(b) That the court grant a preliminary injunction pending this suit, and a perpetual injunction restraining the de-
[fol. 13] fendant, its officers, agents, employes, associates and confederates, enjoining them from making, using or vending the combinations patented in said patents or any of the parts thereof or any other devices embodying the inventions described and claimed in either of said patents or adapted to be used in systems or combinations embodying the same, and from offering or advertising so to do, and from aiding or abetting or in any way contributing to the infringement of said patents or either of them.

(c) That this cause be referred to a Master to make and report an account of damages and profits, accruing from defendant's infringement of said patents, and that the damages reported be increased threefold in view of the wanton character of defendant's infringement, and that plaintiff have judgment for the damages and profits so found and for the costs of this suit.

(d) That plaintiff have such other and further relief as equity may require.

The Bassick Manufacturing Company, J. E. Otis, Jr., Vice President. Lowell W. Taylor, Lynn A. Williams, Williams, Bradbury, McCaleb & Hinkle, Solicitors for Plaintiff.

Duly sworn to by J. E. Otis, Jr. Jurat omitted in printing.

[fol. 14] IN UNITED STATES DISTRICT COURT

ANSWER TO AMENDED BILL OF COMPLAINT—Filed May 2, 1927

To the Honorable Judges of the above entitled Court:

The answer of the above entitled defendant to the Amended Bill of Complaint exhibited against it by the above named plaintiff.

1. Defendant has no information as to whether or not plaintiff is incorporated, organized and existing under and by virtue of the laws of the State of Delaware, whether it is a citizen of Delaware, whether it has its principal place of business at Chicago, and whether it is a resident of Chicago, County of Cook, in the State of Illinois, and therefore denies the same and leaves plaintiff to make full proof thereof.

2. Defendant admits the averments of its existence and organization under the laws of the State of New Jersey, and as to its having a regular and established place of business at Memphis, Shelby County, Tennessee.

3. Defendant denies having committed any act of infringement complained of either within the Western District of Tennessee, Western Division, or elsewhere.

4. Defendant admits that Arthur V. Gullborg on December 21, 1918, filed application for Letters Patent in the United States on certain alleged new and useful improvements in Lubricating Means, and that Letters Patent of the United States, numbered 1,307,734, were granted on said application on June 24, 1919; but defendant denies that at the date of filing said application said Arthur V. Gullborg was a citizen of the United States, and denies each and every other allegation contained in the third paragraph of the bill, respecting the inventorship of Arthur V. Gullborg, and denies particularly that prior to the filing of said application for letters patent he, said Arthur V. Gullborg, was the original, first and sole inventor of the subject matter disclosed and claimed therein, denies that said application was lawfully filed and prosecuted by him and that the statutes and rules of the Patent Office were complied with in the filing and prosecution of said application and issuance of Letters Patent thereon, and leaves plaintiff to make full proof thereof.

5. Defendant denies that Oscar Zerk, prior to November 21st, 1922, was a citizen of the United States, and denies that said Zerk was the original, first and sole inventor of certain new and useful improvements in Lubricating Apparatus, and denies that he lawfully filed and prosecuted an application for United States patent therefor, and [fol. 15] denies that he complied in all respects with the statutes and the rules of the Patent Office, and denies that patent No. 1,475,980 was lawfully granted and issued pursuant to said application on December 4, 1923.

6. Defendant denies each and every allegation in the fifth paragraph of the bill, and particularly denies that said alleged inventions or any part thereof, were in fact inventions, that the subject matter thereof was new or useful or not known or used in this country before the alleged inventions thereof by said Arthur V. Gullborg and Oscar Zerk, denies that the same were not patented or described in any printed publication anywhere before their alleged invention thereof, or more than two years prior to their said applications, denies that the same were not in public use or on sale in this country for more than two years prior to said applications, or not patented in any country by them or their legal representatives on applications filed more than one year before their said applications in this country, and not abandoned, and therefore denies that said patents are now in full force.

7. Defendant is not advised as to whether or not plaintiff is now the sole owner of said United States letters patent here in suit, and of all rights therein and all rights of action for infringement thereof, as alleged, and therefore denies the same and leaves plaintiff to make full proof thereof.

8. Defendant denies each and every allegation contained in the seventh paragraph of the bill, and particularly denies that the alleged inventions patented by said letters patent in suit, are of great utility and of great value to the plaintiff and of great benefit to the public; denies that plaintiff and its predecessors have extensively sold and introduced into public use devices embodying the same, and denies that there has been a very large and rapidly increasing demand therefor.

9. Defendant denies that plaintiff and its predecessors have marked all devices embodying said alleged inventions in full compliance with the statutes of the United States, as alleged in the eighth paragraph of the bill, and defendant further avers that it received no notice of the existence of the patents here in suit prior to the filing of the bill.

10. Defendant denies each and every allegation in paragraph nine of the bill and particularly denies that the public has generally acknowledged the validity of the said Letters Patent, or respected or recognized any rights of plaintiff therein and thereunder, and avers the contrary to [fol. 16] be true and that said letters patent have been generally regarded as invalid and inoperative and without legal effect.

11. Defendant denies each and every allegations of the tenth paragraph of the bill and particularly denies that it has violated any right secured to plaintiff under said Letters Patent in suit, at any time or at any place, and denies having infringed said letters patent, denies any intention or threats of violation of any right of plaintiff under said letters patent, denies that plaintiff has been or will be damaged as alleged, and denies that defendant is about to obtain any profits accruing in equity to the plaintiff.

12. As an additional and separate defense in its behalf, defendant alleges that Arthur V. Gullborg, and Oscar Zerk, were not the original, first and sole inventors of the subject-matter disclosed and claimed in said letters patent, but that they surreptitiously or unjustly obtained said letters patent, for that which was in fact invented by others, who were using reasonable diligence in adapting and perfecting the same, wherefore, said letters patent are void and are of no legal effect.

13. Defendant further avers that the subject-matter disclosed and claimed in said Letters Patent to Gullborg, No. 1,307,734, or all material and substantial parts thereof, had been patented or described in printed publications long prior to the supposed invention or discovery by the said Arthur V. Gullborg, or for more than two years prior to his application for Letters Patent therefor, particularly in the specifications, drawings and claims of the following Letters Patent, and that therefore, said Letters Patent sued upon are null and void:

No. 8,251 to Richardson, July 29, 1851;
No. 182,675 to Johnson, Sept. 26, 1876;
No. 456,295, Stedman, July 21, 189-;
No. 810,959, Marmon, Jan. 30, 1906;
No. 937,682, MacClyment, Oct. 19, 1909;
No. 117,762, Barcus, Nov. 17, 1914;
No. 1,150,420, Davis, Aug. 17, 1915;
Reissue, No. 14,667, Winkley, June 10, 1919;
No. 242,141, Laskey, May 31, 1881;
British patent to Alley, No. 21,893, of 1906;
French patent to Seng, No. 468,869, of 1914;
French patent to Seng (addition) No. 20,083 of 1916.

14. Defendant further avers that the subject-matter disclosed and claimed in said Letters Patent to Oscar [fol. 17] Zerk, No. 1,475,980, or all material and substantial parts thereof, had been patented or described in printed publications long prior to the supposed invention or discovery by the said Oscar Zerk, or for more than two years prior to his application for Letters Patent therefor, particularly in the specifications, drawings and claims of the following Letters Patent, and that therefore, said Letters Patent sued upon are null and void:

No. 1,494,652, Wallace, May 20, 1924;
No. 1,459,662, Manzel, June 19, 1923;
No. 1,416,668, Abbott, May 23, 1904;
British patent to Clarkson, No. 6,940 of 1904;
White Motors Co. Cleveland, Ohio.

15. And as an additional and separate defense in its behalf, defendant alleges that said Arthur V. Gullborg was not the original and first inventor or discoverer of any material and substantial parts of the things patented in said Letters Patent, but that the same, and all material and substantial parts therefor, were previously devised by the several applicants for the Letters Patents identified in the next preceding paragraph herein, wherefore said Letters Patent, are void and of no legal effect.

16. And as an additional and separate defense in its behalf, defendant alleges that the things patented in and by said Letters Patent were in public use and on sale in this

country for more than two years before the applications of Arthur V. Gullborg and Oscar Zerk, therefor, as prior to their alleged inventions thereof, by the following named persons at the places indicated, to wit:

Wilson Instrument and Specialty Company, at Passaic, N. J.
Clarence Wilson, 21 W. 9th Street, New York, N. Y.
Albert K. Bush, 382 Paulsion Avenue, at Passaic, N. J.
William P. Welsh, 134 Center Street, Nutley, N. J.
Chester C. Henry, Summit, N. J.
O. K. Specialty Co., Newark, N. J.
John Swenson, 17 Madison Avenue, Clifton, N. J.
Auto Car Co., Ardmore, Pa.
White Motor Co., Cleveland, Ohio.

wherefore, said Letters Patent are void and of no legal effect.

17. And as an additional and separate defense in its [fol. 18] behalf, defendant alleges that the things patented in and by said Letters Patent, did not, at the date of said Letters Patent, constitute an invention patentable under the law, but were obvious aggregations of old and well known mechanical devices and expedients arranged for operation in an obvious and customary manner, and devoid of invention whereby Letters Patent are invalid and without legal effect.

18. Defendant further avers on information and belief that the inventions of said Gullborg and Zerk patents were known to and used by other persons in this and foreign countries and patented and described in other Letters Patent for this and other countries, the prior uses and names of which persons and the numbers and dates of which Letters Patent are at present unknown to defendant and which when ascertained defendant prays leave to insert by amendment in its answer.

19. Defendant, further answering, avers that the claims of the Letters Patent sued upon cannot be construed to cover or include anything ever made, sold or used by this defendant, and that they are invalid and ineffectual for such purpose, not only in view of the state of the prior art, but also because of the cancellations, of the declarations amounting to disclaimers, and of the express limitations

and restrictions, made or assented to by said patentees in their application for said Letters Patent, and moreover, made or assented to in consequence of repeated rejections and objections by the Patent Office which were acquiesced in by the applicants as a prerequisite to obtaining the allowance of their said Letters Patent as finally issued, all as disclosed by the file wrappers of said Letters Patent, ready in Court to be produced.

20. Defendant further answering says that the devices which have been sold by it, alleged to be infringements, of the Gullborg and Zerk patents aforesaid, were sold for replacement and repair purposes as defendant had been advised that it had the lawful right to do, defendant having in no instance furnished the fixed nipples which are a permanent part of an automobile chassis, and that defendant has therefore not sold any of said articles for purposes of a complete, new installation.

All of which matters and things this defendant is ready and willing to aver, maintain and prove, as this Honorable Court shall direct, and therefore prays that the Bill of Complaint herein may be dismissed with its reasonable costs, [fol. 19] charges and disbursements in this behalf most wrongfully sustained, and to be taxed.

The R. M. Hollingshead Co., by R. M. Bagley, Vice President. Attest: A. T. Reech, Secretary. (Seal.) R. G. Brown and A. D. Waldauer, Solicitors and of Counsel for Defendant. Leonard L. Kalish, E. Hayward Fairbanks, of Counsel for Defendant.

Duly sworn to by R. M. Bagley. Jurat omitted in printing.

IN UNITED STATES DISTRICT COURT

AFFIDAVIT OF D. A. BEEZLEY—Filed Oct. 29, 1926

STATE OF TENNESSEE,
Shelby County:

D. A. Beezley being first duly sworn deposes and says:

I am engaged in the automobile repair business in the [fol. 20] city of Memphis and operate a garage at 453 Monroe Ave. On the second day of April, 1926, a representa-

tive of the R. M. Hollingshead Company called on me for the purpose of selling me a Service Compressor, this being in response to a request made by me over the telephone. When the representative, Mr. Whittaker arrived the following conversation took place:

Beezley: "I have a number of customers whose cars are equipped with Alemite and Zerk lubricating system and I want to get a Service Compressor that I can use to grease these cars."

Whittaker: "I have just what you want—I have a gun in all respects superior to the Alemite gun and which will fit Alemite and Zerk fittings for about one half the cost of the Alemite gun." I will send out a gun and a man to demonstrate it to you."

Beezley: "I also want to buy some fittings, but I cannot compete with the Alemite people, for I cannot pay the price they ask for the Alemite fittings."

Whittaker: "We do not handle the fittings, but we have a representative, Mr. R. J. Martinetti who is connected with a company that handles these fittings. I will have him call on you and sell you some."

Mr. Whittaker sent me one of the Service Compressors on April 7, 1926 and also rendered me an invoice for $63.50.

I file herewith the Service Compressor as Exhibit A; duplicate of the original order as Exhibit B; original invoice as Exhibit C; and a copy of the delivery ticket as Exhibit D.

Several days after receiving the Service Compressor I called up the R. M. Hollingshead Company and requested that they send the representative who could sell me the pin fittings. He replied that he would and later in the day came by and told me they were temporarily out but that in the next few days another representative of the company, Mr. Martinetti would find out where he could get some of the fittings and get some for me. He told me that Martinetti had a line on a place where he could get these fittings and could furnish them to me. He also said Martinetti had been selling them heretofore.

(Signed) D. A. Beezley.

Subscribed and sworn before me this 12th day of April, 1926.

Gordon W. Trask, Notary Public. (Seal.) My commission expires Jan. 21, 1929.

[fol. 21] EXHIBIT B—BEEZLEY AFFIDAVIT

The R. M. Hollingshead Co.

Home Office and Factories, Camden, N. J., U. S. A.

Sold to: D. A. Beezley. File No.: —. Date: 4/2/26.
Trading as "Beezley, The Brake Man."
Town: Memphis. State: Tenn.
Street: 453 Monroe. County: Shelby. Business: Brakes.
Post Office: Memphis. R. F. D.: ——
Sold Before? (State "Yes" or "No.") No.
Railroad Station (If other than Town Address): ——.
Via ——.
Ship: ("At Once" or "Specify Date"): At once.

Office use only	Quantity	Size	Article	Price	Office use only
	1 only		High pressure chassis lubrication	63.50	
	1 "		Grease loader		

References: Auburn Alestar Co., Standardized Part Co., M. J. Lovett (Grocery).

State here any conditions affecting this order: ⅓ due each 30 days beginning 3/10/26.

Terms: 30 days Net; 2% 10 days from date of invoice; F. O. B. shipping point. (Fill in here point from which shipment is to be made.) Net Amount of Sale, $——.

Should it be necessary to communicate in reference to this order please address the office checked at the top.

A complete list of products manufactured by us appears on the back. Look the list over and see that you have everything you require before the Salesman leaves.

This order is given in good faith and duplicate left. No countermand will be accepted. It is understood that there are no conditions whatever, verbal or otherwise, except as written herein. All orders subject to the approval of the Company.

Salesman: J. P. Whitaker. Customer's Signature: D. A. Beezley.

Salesman's Order No. —.

This copy of Order to be left with Customer.

(Form 220.)

[fol. 22] EXHIBIT C—BEEZLEY AFFIDAVIT

Invoice

Form 113.

File No. 2054 Tenn. Order No. 2020 Mfs.

The R. M. Hollingshead Co.

Manufacturers of Whiz Auto Products

Florida St. and Georgia Ave., Memphis, Tenn.

Bills not paid at maturity subject to 6% interest.
Terms: 2% 10 Days; 30 Days Net.
Claims for damage or shortage to be allowed must be accompanied by freight receipt with notation of Claim entered thereon by Freight Agent.

21 16 Due 5-10-26
21 16 Due 6-10-26
21 18 Due 7-10-26

D. A. Beezley, Beezley the Brake Man, 453 Monroe Ave., Memphis, Tenn., Shelby Co.

Salesman: Whitaker. Am't: [redacted].
Salesman's Order No. —. Customer's Order No. —.
Please detach and retain lower portion of Invoice. When you remit send us only the upper part. Your cancelled check will be your receipt.

Shipping Instructions: Ship to: As above. Routing: Truck. F. O. B. Memphis. (Stamped in red): Shipped from Memphis Branch, Apr. 8, 1926. Mail remittance to Georgia Ave. & Florida St., Memphis Tenn.

Office References: Date rec'd: 4-2-26. Sold before: No. —. Date taken: 4-2-26. C. Code: 6350, 835. Business: Brakes. When to ship: At once.

1 Only	Whiz High Pressure Chassis Lubricator, Model "C"	60.00	60.00
1 Only	Whiz Grease Loader	3.50	3.50
			63.50

(Stamped in Red): Special—Save Your Discount. You will save $1.27 if your check for $62.23 is received on or before 4-12-26. 2% 10 days, 30 days net—72% per year.

[fol. 23] 1 only Side Walk Sign—Whiz Gear Grease.
2 only Angle Signs—Whiz Gear Grease.
W.

(Stamped in Red): Positively No Goods Sold on Consignment or Returnable without Written Authority from this Office.

Notice—All goods sold F. O. B. Memphis, Tenn. No freight allowance.

We hereby guarantee that the merchandise covered by this invoice has been produced or manufactured in accordance with the Federal Child Labor Act of September 1st, 1916.

The R. M. Hollingshead Co.

[fol. 24] EXHIBIT D— BEEZLEY AFFIDAVIT

Uniform Domestic Straight Bill of Lading Adopted by Carries in Official, Southern and Western Classification Territories, March 15, 1922

If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges. (See section 7 of conditions.) —— ——, (Signature of Consignor.)

If charges are to be prepaid write or stamp here, "To be Prepaid."

Received $——, to apply in prepayment of the charges on the property described hereon. —— ——, Agent or Cashier, per —— ——. (The signature here acknowledges only the amount prepaid.)

Charges advanced: ——.

This Memorandum is an acknowledgement that a bill of lading has been issued and is not the Original Bill of Lading nor a copy or duplicate covering the property named herein, and is intended solely for filing or record.

Received, subject to the classifications and tariffs in effect on the date of the receipt by the carrier of the property described in the Original Bill of Lading, from The R. M. Hollingshead Co., 21856, the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

At Mfro. 4/7/26.
By ——.

Shipper's No. ——. Agent's No. ——. Railroad: ——.
(Mail or street address of consignee—for purposes of notification only:)
Consigned to: Beezley, The Brake Man.
Destination: 453 Monroe.
State of ——. County of ——.
Route: ——. Car Initial: ——. Car No. ——.

[fol. 25]

No. packages	Description of articles, special marks and exceptions	Weight sub. to correct'n	Class or rate	Check column
	Cases Soap (20c) Max'm Value Per Lb.			
	Bbls. Soap (20c) Max'm Value Per Lb.			
	Kegs Soap (20c) Max'm Value Per Lb.			
	Drum Petroleum Lubricating Oil			
	Cases Petroleum Lubricating Oil in Tin			
	Cases Petroleum Lubricating Grease, in Cans			
	Drum Petroleum Lubricating Grease			
	Kegs Petroleum Lubricating Grease			
	Drum Petroleum Harness Oil			
	Cases Petroleum Harness Oil in Tin			
	Cases Liquid Glue in Tin			
	Cases Metal Cutting Compound Paste			
	Hand Truck Without Stds.			
	Cases Meas Pumps			
	Cases Paint N. O. I. B. N. no label req.			
	Cases Anti Freeze Compound			
	Cases Polishing Compound, N. O. I. B. N. red label			
	Cases Polishing Compound, N. O. I. B. N. no label			
	Cases Liquid Stove Polish, no label			
	Cases Auto Top Dressing, no label			
	Cases Liquid Shoe Dressing			
	Cases Furniture Polish in —			
	Cases Paste in Tin			
	Cases Liquid Cement, no label			
	Bbls. Harness Dressing			
	Cases Harness Dressing in tin			
1	only Whiz Lubricator.			
1	" Refiller.			

This is to certify that the above articles are properly described by name, and are packed and marked and are in proper condition for transportation, according to the regulations prescribed by the Interstate Commerce Commission.

* If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight."

Note—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding —— per ——.

The R. M. Hollinshead Co., Shippers, per AJH.

Permanent post-office address of shipper: ——.

—— —— Agent, per —— ——.

[fol. 26] IN UNITED STATES DISTRICT COURT

AFFIDAVIT OF O. A. CUMMING—Filed Oct. 29, 1926

O. A. Cumming, being first duly sworn, deposes and says:

I am a citizen and resident of Shelby County, and reside at 649 Landis Street.

On the 13th day of September, 1926, I went to the R. M. Hollingshead Company's place of business at the corner of Caroline and Florida Streets in the City of Memphis, to make some purchases. While there I asked the salesman, waiting on me, for a small hand greese gun, and he replied that he had just what I wanted, telling me that it was something new they had just brought out. I was in the stock room with him at the time. He took from a large case a package containing one of the guns, and exhibited it to me. After inspecting the gun, I told him it was just what I wanted, and bought it. He billed it to me at fourteen dollars and fifty cents ($14.50). I paid the bill and took the compressor with me.

I file herewith as Exhibit "A" the shop compressor, together with metal hose, bayonet coupling, and Zerk adapter. The package in which I received the compressor contained a white cardboard with instructions. I file that card as Exhibit "B". I file the invoice rendered to me by the R. M. Hollingshead Company, as Exhibit "C".

O. A. Cumming.

Sworn to and subscribed before me this the 13th day of September, 1926.

W. E. Krafft, Notary Public. (Seal.) My commission expires Jan. 20th, 1930.

[fol. 27] EXHIBIT B—CUMMING AFFIDAVIT

Instructions for Filling and Operating Whiz High Pressure Grease Gun, No. 20

To Fill Barrel of Gun

1. Remove hose or Ball Joint Connector.
2. Remove Booster head from barrel of gun.
3. Hold gun barrel in left hand. Shove handle of piston rod in as far as it will go.

4. Hold piston rod latch down against cap of gun with thumb of left hand.

5. Insert open end of gun barrel in the lubricant several inches. At the same time with the right hand slowly pull piston rod outward all the way. This loads the gun. Remove thumb to release piston rod latch.

6. Twist gun barrel to break suction and thus retain load in the gun barrel before removing barrel from the lubricant.

7. If you do not get a full load of lubricant the first time, retain the part of load and repeat filling operation.

8. Wipe off excess lubricant around mouth of gun barrel.

9. Screw Booster head on barrel being careful not to strip the threads.

10. Out stroke the lever handle of pump head all the way.

11. Hold barrel of gun in left hand with lever out all the way. Place head of gun against something firm to give you support. Then push in with palm of right hand on handle at end of piston rod to compress lubricant in gun barrel and advance it to Booster head.

12. Operate the pump lever several full strokes. Do not hammer on handle of piston rod. To do so would injure the gun.

13. Replace Hose of Ball Joint Connector.

14. Unless there are air pockets in the lubricant, the gun should now discharge galore at each stroke of the pump lever.

[fols. 28 & 29] To Discharge Air

Unscrew Booster head a few threads which should be just enough to permit air to escape through the threads as you push in on the handle at end of piston rod. It may be necessary to push the handle of piston rod several times before all the air will escape. After air has thus been removed, be sure to screw gun head on tight before again operating.

The Whiz High Pressure Grease Gun will develop a pressure of 8,000 to 10,000 pounds by working the lever on Booster head at full stroke.

The one thing which will prevent satisfactory operation of this pump is the presence of air pockets. This should be avoided by carefully following directions as above. To fill the gun barrel with paddle or stick is almost certain to forms air pockets.

Screw ball point coupling on end of gun, operate pump lever until lubricant fills ball joint coupling and you are ready to use the equipment.

For Alemite Fittings

For lubricating Alemite fittings the (2 joint) ball jointed hose with Coupling Assembly for Alemite fittings should be used.

For Dot Fittings

Attach Dot Coupling Assembly to fitting on car. Attach (2 joint) ball jointed hose to Alemite fitting on the end of Dot Coupling Assembly and operate the booster as a pump. The Dot Coupling Assembly must be held tightly screwed to the fitting on the car, to prevent force of grease unscrewing same. Dot Coupling will be furnished for $3.50.

For Zerk Fittings

Unscrew (2 joint) ball jointed hose from high pressure booster assembly and replace with Zerk Coupling Assembly.

The R. M. Hollingshead Co., General Offices and Factories, Camden, N. J., U. S. A. Branches in Principal Cities.

Printed in U. S. A.

[fol. 30] EXHIBIT C—CUMMING AFFIDAVIT

Uniform Domestic Straight Bill of Lading, Adopted by Carriers in Official, Southern and Western Classification Territories, March 15, 1922

If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges. (See section 7 of conditions.) —— ——. (Signature of Consignor.)

If charges are to be prepaid write or stamp here, "To be Prepaid."

Received $——, to apply in prepayment of the charges on the property described hereon. —— ——, Agent or Cashier, per —— ——. (The signature here acknowledges only the amount prepaid.)

$—— Charges advanced.

This shipping order must be legibly filled in, in ink, in Indelible Pencil, or in Carbon, and ratained by the Agent.

Receive, subject to the classification and tariffs in effect on the date of the issue of this Shipping Order, from The R. M. Hollingshead Co., the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

At Mfro. 9/13/26.

By ——.

Shipper's No. 37747. Agent's No. ——. Railroad: ——.

(Mail or street address of consignee—for purposes of notification only:)

Consigned to: O. A. Co.
Destination: ——.
State of ——.
County of ——.
Route: ——.
Car Initial: ——.
Car No. ——.

[fol. 31]

No. packages	Description of articles and special marks	*Weight sub. to correct'n	Class or rate	Check column
	Cases Soap (20c) Max'm Value Per Lb.			
	Bbls. Soap (20c) Max'm Value Per Lb.			
	Kegs Soap (20c) Max'm Value Per Lb.			
	Cases Petroleum Lubricating Oil in Tin			
	Cases Petroleum Lubricating Grease, in Tin			
	Drum Petroleum Lubricating Grease, in Tin			
	Kegs Petroleum Lubricating Grease, in Tin			
	Drum Petroleum Harness Oil			
	Cases Petroleum Harness Oil in Tin			
	Cases Liquid Glue in Tin			
	Hand Truck Without Stds.			
	Cases Meas Pumps			
	Cases Steel Shelving, N. O. I. B. N., K. D., Flat			
	Cases Paint N. O. I. B. N. no label req.			
	Cases Anti Freeze Compound Liquid			
	Cases Liq. Polishing Compound, N. O. I. B. N., no label			
	Cases Liq. Auto Top Dressing, in Tin, no label			
	Cases Liquid Stove Polish, in Tin, no label			
	Cases Lea Dressing, in Tin, no label			
	Cases Liquid Cleaning Compound, no label			
	Cases Furniture Polish in —			
	Cases Paste Polish, in Tin			
	Cases Liquid Cement, in Tin, no label			
	Cases Liquid Leather Cement, in Tin, no label			
	Bbls. Harness Dressing			
	Circulars, Pamphlets.			
	Cases Prtd. Adv. Matter, Catalogues.			
1	#20 H. P. Grease Gun			14.50
3	pts. Top Dressing			1.98
				$16.48
		16.48		
	Less 2%	.33		
		16.15		

The fibre boxes used for this shipment conform to the specifications set forth in the Box Maker's Certificate thereon and all other requirements of Rule 41 of the Consolidated Freight Classification.

This is to certify that the above articles are properly described by name, and are packed and marked and are in proper condition for transportation, according to the regulations prescribed by the Interstate Commerce Commission.

If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight."

Note—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding.

—— per ——.

The R. M. Hollinshead Co., Shippers, per AJH.
Permanent post-office address of shipper: ——.

Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading.

[fol. 32] In United States District Court

Order Granting Leave to Defendant to Amend Answer—Filed Dec. 16, 1927

This cause came on this day to be heard on motion of defendant for leave to amend its answer, which amendment was exhibited to the Court and to counsel for the plaintiff, and the Court having considered the same is pleased to order and doth now order and adjudge that leave be and it is now hereby given to defendant to file said amendment to its answer.

H. B. Anderson, Judge. O. K., Lowell W. Taylor, for Plaintiff. H. A. Minor, for Deft.

In United States District Court

Amendment to Answer—Filed Dec. 15, 1927

Now comes defendant by leave of Court obtained, and amends its Answer heretofore filed, as follows:

On page 4 of the Answer cancel the list of prior art patents at the end of paragraph 13 and insert in place thereof the following:

Richardson, No. 8,251, July 29, 1851;
Johnson, No. 182,675, Sept. 26, 1876;
Laskey, No. 242,141, May 31, 1881;
Sholder, No. 242,564, June 7, 1881;
Marks et al., No. 249,194, Nov. 8, 1881;
Stedman, No. 456,295, July 21, 1891;
Lees, No. 610,359, Sept. 6, 1898;
Lang, No. 905,717, Dec. 1, 1908;
Mason, No. 919,743, Apr. 27, 1909;
[fol. 33] Dupre, No. 927,337, July 6, 1909;
MacClyment, No. 937,682, Oct. 19, 1909;
Townsend, No. 983,095, Jan. 31, 1911;
Wilson, No. 988,422, Apr. 4, 1911;
Brown, No. 1,027,588, May 28, 1912;
Danberg, No. 1,051,805, Jan. 28, 1913;
Barcus, No. 1,117,762, Nov. 27, 1914;
Brown, No. 1,141,101, June 1, 1915.
Davis, No. 1,150,420, Aug. 17, 1915;
Winkley, No. 1,201,414, Oct. 17, 1916;
Winkley, Reissue, No. 14,667, June 10, 1919;
Gullborg, No. 1,307,733, June 24, 1919.

British Patents.

Grey, No. 18,727, 1912;
Sharpe, No. 26,134, Nov. 4, 1912;
Alley, No. 21,893, 1906;
Seng, No. 3,028, Feb. 24, 1915.

French Patents

Chandeur, No. 421,556, Feb. 25, 1911;
Seng, No. 468,869, 1914;
Seng (Addition), No. 20,083, 1916.

Publication in the French journal "Omnia", dated April 25, 1914, 9 Annee 434, page 258.

On page 4 of the Answer, in paragraph 14, cancel the list of prior art patents and insert the following list:

Hay et al., No. 499,541, June 13, 1893;
Jacques, No. 1,383,306, July 5, 1921;
Crotty, No. 1,400,871, Dec. 20, 1921;
Abbott, No. 1,416,668, May 23, 1922;
Manzel, No. 1,459,662, June 19, 1923;
Wallace, No. 1,494,652, May 20, 1924;
Clarkson (British), No. 6,940, of 1904.

On page 6 of the Answer, after paragraph 20, insert:

"21. As an additional and separate defense in its behalf, defendant alleges that the alleged invention forming the subject matter of certain claims 14 and 15 of the Gullborg Patent No. 1,307,734 in suit also forms the sole subject matter of certain claims 3, 4 and 5 of Patent No. 1,307,733 granted to said Arthur V. Gullborg on June 24, 1919, and [fol. 34] that, therefore, said claims 14 and 15 of Patent No. 1,307,734 are invalid and of no legal force and effect on the ground of double patenting;

22. As an additional and separate defense in its behalf, defendant alleges:

(a) That the only alleged novel element in claims 14 and 15 of the Gullborg Patent in suit, to wit, the 'grease cup' is recited in said claims 14 and 15 in 'combination with' any grease pump, hose and coupler which may be connected to said grease cup;

(b) That said 'grease cup' also forms the sole subject matter of claims 3, 4 and 5 of the Gullborg Patent No. 1,307,733;

(c) That said 'grease cups' have been and are sold outright by plaintiff as a separate article of manufacture under claims 3, 4 and 5 of the Gullborg Patent No. 1,307,733, and without any restrictions or conditions as to their use;

(d) That said 'grease cups' manufactured and sold outright by plaintiff under it Gullborg Patent No. 1,307,733 have but one purpose, to wit, to receive lubricant under pressure, and that in order to use said grease cups for this purpose it is necessary to connect a grease pump onto said grease cups by some coupling means for co-acting with the bayonet lugs or pins of said grease cups, all as clearly disclosed in the specification and drawings of said Patent No. 1,307,733;

(e) That the purchasers of said 'grease cups' under claims 3, 4 and 5 of Gullborg Patent No. 1,307,733 acquired from the plaintiff a constructive license to use said 'grease cups' in their naturally intended manner, to wit, by connecting a grease pump of some kind onto the 'grease cups' and forcing grease thereinto; and

(f) That, therefore, said claims 14 and 15 if Gullborg Patent No. 1,307,734 are invalid—

(1) because they claim nothing more than the obviously intended use of the 'grease cups' sold by plaintiff under claims 3, 4 and 5 of Patent No. 1,307,733, and

(2) because the subject matter of claims 14 and 15 of the patent in suit involves no intention over or distinct from the invention covered by claims 3, 4 and 5 of Gullborg Patent No. 1,307,733, and

(3) because said claims 14 and 15 thus tend to deprive the outright purchasers of plaintiff's 'grease cups' and constructive licensees under claims 3, 4 and 5 of plaintiff's Gullborg Patent No. 1,307,733, of the obviously intended and sole use for which said 'grease cups' were sold.

[fol. 35] 23. As an additional and separate defense in its behalf, defendant alleges:

(a) That the 'grease cups' under plaintiff's Gullborg Patent No. 1,307,733 have been sold by plaintiff in very large quantities for about the past nine years, first, in the automotive industry and more recently in the industrial fields, under its trade-mark "Alemite";

(b) That the plaintiff has introduced its so-called 'Alemite grease cups' under its Gullborg Patent No. 1,307,733 and has flooded both the automobile and industrial fields with these 'grease cups' largely to the exclusion of other competing grease cups for pressure lubrication;

(c) That the introduction of plaintiff's 'Alemite grease cups' under its Gullborg Patent No. 1,307,733 and its wide distribution in the automotive and industrial fields, to the exclusion of other competitive equipment, resulted primarily from certain market conditions prevalent at the time of its introduction, as well as from a gigantic national advertising program initiated and fostered by the plaintiff on behalf of its said product and also as a result of tremendous sales effort and pressure, and the acquiring by plaintiff of the successfully competing companies;

(d) That said 'Alemite grease cups' under Gullborg Patent No. 1,307,733 have been sold by plaintiff not only outright and without any conditions or limitations whatso-

ever, but have sold to the public at large for about the past nine years without any actual notice to the purchasers or public of any broad monopoly solely of the 'use' of said 'grease cups' as is now apparently contended for by plaintiffs under claims 14 and 15 of the Gullborg Patent No. 1,307,734 in suit.

(e) That said grease cups under Gullborg Patent No. 1,307,733 were not bought by the public from the plaintiff, with any understanding that they could not be used in any way whatsoever except by employing a grease pump, hose and coupler prescribed by plaintiff under claims 14 and 15 of the Gullborg Patent in suit:

(f) That said 'Alemite grease cups' under Gullborg Patent No. 1,307,733, which were bought outright as a separate article of manufacture, by a public unsuspecting of a monopoly solely of the use of the 'grease cups' under claims 14 and 15 of the Gullborg Patent in suit, now constitute a very large majority 'lubricant receptacles' in the automotive and industrial fields;

(g) That since said 'Alemite grease cups' under Gull-
[fol. 36] borg Patent No. 1,307,733 comprise a very large majority of the 'lubricant receptacles' in the automotive and industrial fields, therefore, an exclusive monopoly at this late date, solely of the 'use' of said grease cups under claims 14 and 15 of the Gullborg Patent in suit, or an exclusive monopoly of all lubricant dispensing pumps of any old construction and any description whatsoever, for putting grease into these 'grease cups', would be paramount to and co-extensive with a monopoly of grease consumed through these grease cups and would, in addition, constitute a controlling influence over the many millions of outright purchasers and users of these 'grease cups;'

(h) That such grease monopoly and controlling influence in the automotive and industrial fields

(1) is unjustifiable either in law or in equity by any patent rights upon a mere and relatively trifling mechanical improvement;

(2) is contrary to public interest and policy, and

(3) plaintiff should be estopped at this late date from asserting such broad monopoly under claims 14 and 15."

E. Hayward Fairbanks, Leonard L. Kalish, Bends, Quinn & McKay, Jno. B. Kelber, Counsel for Defendant.

Plaintiff's counsel consents that the foregoing amendment may be entered with the same force and effects as if by leave of Court heretofore obtained.

Lowell W. Taylor, Counsel for Plaintiff.

[fol. 37] IN UNITED STATES DISTRICT COURT

ORDER FOR PRELIMINARY INJUNCTION—Filed March 21, 1927

This cause having come on to be heard upon the plaintiff's motion for a Preliminary Injunction and an Order to Show Cause why the said Preliminary Injunction should not be granted; and upon the Bill of Complaint as amended and the defendant's answer; and upon the affidavits of J. E. Otis, Jr., Ernest W. Davis, Albin C. Ahlberg, D. A. Beezley, O. A. Cumming, on behalf of the plaintiff; and upon the affidavits of Albert H. Hutt, Charles Joseph Hecker, Harold A. Southgate, Leonard A. Kalish, R. M. Hollingshead, R. M. Bagley, Charles Mc C. Chapman and William J. Jackson on behalf of the defendant; and the exhibits identified in and by the said affidavits; and the cause having been argued by Lowell W. Taylor and Lynn A. Williams on behalf of the plaintiff and by R. G. Brown and E. Hayward Fairbanks on behalf of the defendant; and the Court being fully advised in the premises, it is hereby

Ordered, that a Preliminary Injunction issue under the seal of this Court enjoining and restraining the defendants, its officers, agents and employes, pending this suit, from making, using or selling any of the forms or parts of lubricating apparatus referred to in the said affidavits as having been sold by the defendant, and particularly the forms and parts of lubricating apparatus exemplified in the service compressor, together with the Alemite type coupler and the Zerk type adapter identified in the affidavit of D. A. Beezley as Exhibit A, and in the shop compressor, together with metal hose, bayonet coupler and Zerk type adapter

identified in the affidavit of O. A. Cumming as Exhibit A, and as in part illustrated in Exhibit J and Exhibit K of the Davis affidavit, or any other devices not manufactured by plaintiff embodying the invention described and claimed in claims 1, 2, 3, 4, 5, 6, 8, 12, 14 and/or 15 of Gullborg patent No. 1,307,734 and/or embodying the invention described and claimed in claims 2, 3 and/or 5 of the Zerk patent No. 1,475,980, or adapted for use in systems or combinations embodying the same; and from aiding or abetting or contributing in any other way to the infringement of the said Letters Patent or either of them.

H. B. Anderson, United States District Judge.

Approved as to form.

——— ———, Counsel for Plaintiff. Counsel for Defendant.

[fol. 38] IN UNITED STATES DISTRICT COURT

ORDER MODIFYING PRELIMINARY INJUNCTION—Filed April 20, 1927

This cause came on to be heard this 20th day of April, 1927, upon the motion of the defendant to modify the preliminary injunction heretofore granted on the 21st day of March, 1927.

And upon presentation of the motion the court is of opinion that the injunction should be modified by striking out of the order for the injunction and upon the injunction itself Claim 12 of the Gullborg Patent, said Claim having been held to be invalid by the Circuit Court of Appeals for the Sixth Circuit, in the cases pending in that court and decided on the 23rd day of March, 1927, involving the Gullborg Patent.

The motion of the defendant to strike from the order entered herein granting a preliminary injunction on March 21st of the words in the third and fourth lines from the bottom of said order, to-wit: "adapted for use in systems or combinations embodying the same," is taken under advisement and counsel may submit briefs upon the propriety of striking these words from the order and from the injunction.

To all of which the plaintiff excepts.

H. B. Anderson, Judge.

IN UNITED STATES DISTRICT COURT

PETITION OF DEFENDANT FOR LEAVE TO USE NEW DEVICES FOR COUPLERS ON GREASE GUN AND PIN FITTINGS IN LIEU OF COUPLER AND PIN FITTINGS CLAIMED TO INFRINGE ALEMITE FITTINGS AND COUPLER USED BY PLAINTIFF—Filed April 20, 1927.

Now comes the defendant, the R. M. Hollingshead Company, by E. H. Fairbanks, L. L. Kalish, R. G. Brown, and [fol. 39] Abe D. Waldauer, its counsel of record, and shows to the Court a coupler for a grease gun invented, manufactured and used for about two years past by the Chas P. Rogers Company of New York, and asks the judgment of the Court whether use of this coupler by the defendant will constitute an infringement of the Zerk or Gullborg patents, or be considered a violation of the preliminary injunction heretofore granted by this Honorable Court.

Defendant shows that said coupler has a solid and immovable washer, or gasket, and pressure of the washer, or gasket, against the pin fittings is secured by a continuous inner-wedge device, and not by spring pressure. This coupler has been in continuous use for about two years past by the public and a specimen of said coupler is here to the Court shown.

II

The defendant further shows to the Court another form of coupler, called the R. M. Hollingshead coupler, in which there is a solid and immovable washer, not actuated by any kind of spring either internal or external, and, in no way resembles the coupler used by the plaintiff. Union or sealing between the washer and the pin fitting is secured by pressure of the grease and not by any spring either external or internal.

The defendant asks the judgment of the Court whether this form of coupler will be considered to be an infringement of the Zerk or Gullborg Patents, or a violation of the preliminary injunction heretofore granted by this Honorable Court.

A specimen of said coupler is here to the Court shown.

III

The defendant further shows and exhibits to the Court a pin fitting recently patented, which can be used with said types of coupler and prays the judgment of the Court whether such pin fitting constitutes an infringement of the pin fitting used and manufactured by the plaintiff, and whether the use of such pin fitting by the defendant would be a violation of the injunction heretofore granted in this cause.

All of which is respectfully submitted.

E. H. Fairbanks, L. L. Kalish, R. G. Brown, A. D. Waldauer, Attorneys for Defendant.

[fol. 40] In United States District Court

Order of Reference as to the Use by the Defendant of New Devices for Couplers and Pin Fittings—Filed April 20, 1927

Upon the hearing of the motion to modify the preliminary injunction had on the 20th day of April, 1927, the defendant submitted two devices for couplers and one device for a pin fitting, and ask that the court determine whether or not said devices constituted infringement of any of the Claims of the Gullborg or Zerk Patents involved in this proceeding.

In this matter the Court is pleased to refer said petition to A. G. Riley, Standing Master, with instructions to set a time and hear proof in regard to the question as to whether said devices, or similar devices, which may be submitted before him, constitute infringements of any of the Claims of the Gullborg and Zerk Patents.

The Master will hear this proof and report as speedily as possible to the Court his conclusions, both as to matters of fact and in matters of law.

All of which is ordered this 20th day of April, 1927.

To all of which the plaintiff excepts.

H. B. Anderson, Judge.

IN UNITED STATES DISTRICT COURT

SUPPLEMENTAL PETITION OF DEFENDANT FOR LEAVE TO USE NEW DEVICES FOR COUPLERS ON GREASE GUN AND PIN FITTINGS IN LIEU OF COUPLER AND PIN FITTINGS CLAIMED TO INFRINGE ALEMITE FITTINGS AND COUPLER USED BY PLAINTIFF—Filed May 2, 1927

Now comes the defendant, the R. M. Hollingshead Company, by E. H. Fairbanks, L. L. Kalish, R. G. Brown and Abe D. Waldauer, its counsel of record, and shows the Court [fol. 41] a coupler for a grease gun, marked "Defendant's Exhibit D" and asks the judgment of the Court whether use of this coupler by defendant will constitute an infringement of the Zerk or Gullborg patents, or be considered a violation of the preliminary injunction heretofore granted by this Honorable Court.

I. Defendant shows that said coupler has a solid and immovable washer, or gasket, and pressure of the washer or gasket, against the pin fittings is secured by a continuous screw device, and not by spring pressure.

II. Defendant further shows and exhibits to the Court a pin fitting marked "Defendant's Exhibit E" and prays the judgment of the Court whether such pin fitting constitutes an infringement of the pin fitting used and manufactured by the plaintiff, and whether the use of such pin fitting by the defendant would be a violation of the injunction heretofore granted in this cause.

All of which is respectfully submitted.

E. Hayward Fairbanks, L. L. Kalish, R. G. Brown, A. D. Waldauer, Attorneys for Defendant.

IN UNITED STATES DISTRICT COURT

WRIT OF INJUNCTION—Filed March 24, 1927

UNITED STATES OF AMERICA,
Western District of Tennessee, ss:

The President of the United States of America, to the R. M. Hollingshead Company, Greeting:

Whereas, the Bassick Manufacturing Company, a citizen of Delaware, has filed on the Equity side of the District

Court of the United States for the Western District of [fol. 42] Tennessee, a bill against the R. M. Hollingshead Company, and has obtained an allowance for an injunction as prayed for in said bill;

Now, therefore, we having regard to the matters in said bill contained, do hereby command and strictly enjoin you, the said R. M. Hollingshead Company from making, using or selling any of the forms or parts of lubricating apparatus referred to in the said affidavits as having been sold by the defendant, and parficularly the forms and parts of lubricating apparatus exemplified in the service compressor, together with the Alemite type coupler and the Zerk type adapter identified in the affidavit of D. A. Beezley as Exhibit A, and in the shop compressor, together with metal hose, bayonet coupler and Zerk type adapter identified in the affidavit of O. A. Cumming as Exhibit A, and as in part illustrated in Exhibit J and Exhibit K of the Davis affidavit, or any other devices not manufactured by plaintiff embodying the invention described and claimed in claims 1, 2, 3, 4, 5, 6, 8, 12, 14 and/or 15 of Gullborg patent No. 1,307,734 and/or embodying the invention described and claimed in claims 2, 3, and/or 5 of Zerk patent No. 1,475,890, or adapted for use in systems or combinations embodying the same; and from aiding or abetting or contributing in any other way to the infringement of the said Letters Patent or either of them.

Which commands and injunctions you are hereby respectively required to observe and obey until our said District Court shall make further order in the premises.

Wherein fail not under penalty of the law thence ensuing. A copy of said order is hereto attached.

Witness the Honorable Harry B. Anderson, Judge of the District Court of the United States, this the 21st day of March, A. D. 1927, and of the American Independence the 151st year.

A. G. Mathews, Clerk, by W. L. McKinney, C. D. C.
(Seal.)

(Reverse side)

3-22-27.—This writ came to hand at Memphis, Tennessee & I executed same on the within named Defendants, R. M. Hollingshead Co., as herein commanded by reading to &

leaving a copy of same. C. A. Pohle, being credit manager [fol. 43] accepted service for R. M. Hollingshead.

This 22nd day of March, 1927.

Arthur Rogus, U. Marshal. C. E. Fawwater, Deputy.

Street car fare endeavoring to serve	14¢
Serving	14
	28¢

[File endorsement omitted.]

IN UNITED STATES DISTRICT COURT

TESTIMONY TAKEN BEFORE HON. A. G. RILEY, MASTER, IN ACCORDANCE WITH THE ORDER OF APRIL 20, 1927; CONDENSED PURSUANT TO EQUITY RULE 75—Filed Dec. 31, 1928

May 3, 1927.

HUGO C. GIBSON, witness called on behalf of defendant, testified as follows:

His name is Hugo C. Gibson, fifty-three years old; oc- [fol. 44] cupation, consulting engineer; resident of Philadelphia, Pennsylvania. His qualifications as a mechanical expert were accepted by plaintiff.

A bayonet type coupler (product of the C. P. Rogers Company, Jersey City, N. J.) was offered and introduced in evidence as defendant's Exhibit A.

A sectional duplicate of Exhibit A was offered and introduced in evidence as defendant's exhibit A-1.

Offered in evidence as defendant's Exhibit C, pin fitting.

Describing defendant's Exhibit A coupler, we have a structure which consists of a main body having external screw threads and a cap or end piece cooperating with the screw thread so that the whole may be assembled. In that cap there is a hole and slot which accommodates and permits co-action with a fitting for lubrication. In operation, the coupler is placed upon the fitting and turned around the fitting. The two lugs of the fitting engage with an internal stepped screw thread within the slotted cap or end piece of the coupler. The surface serrations of the screws

prevent easy unscrewing or backing-off of the coupler from the fitting. As the coupler is screwed onto the fitting a washer or gasket within the coupler is pressed against the end of the fitting, thereby making a tight joint between the end of the fitting and the body of the coupler so that fluid passing through the coupler and fitting, under pressure, will not leak from the joint made by the gasket. While the interrupted or stepped screw threads in the coupler will maintain a pressure-proof connection between coupler and fitting, yet the coupler can be disconnected from the fitting by simply turning it in the reverse direction by hand.

The gasket or washer in the coupler of defendant's Exhibit A is a plain flat washer incapable of any sliding or reciprocating movement within the coupler. It is merely adapted to be pressed or squeezed against the fitting by the co-action of the stepped screws of the coupler with the lugs of the pin fitting.

There is no spring in the coupler of defendant's Exhibit A, nor is there any other resilient means for acting upon the plain flat leather gasket or washer within the coupler.

Referring to Claim 1 of Gullborg patent No. 1,307,734 involved in this suit, and to the coupler of defendant's Exhibits A and A-1, and the fitting of defendant's Ex-
[fol. 45] hibit C; I will say that the element called for in the last part of the claim, namely "a perforated sealing disk slidably mounted in the enlarged portion of said bore, and a spring confined between the ends of said conduit and said disk for urging said disk against said first named coupling member" is not present in the coupler of defendant's exhibit.

Referring to the same exhibits and to Claim 2 of the Gullborg patent, I will say that there is no "perforated sealing disk mounted to reciprocate in the bore of said coupling member, means for yieldingly urging said sealing disk against the closed end of said first named coupling member" as called for in that claim.

Referring to the same exhibits and to Claim 3 of the Gullborg patent in suit, I will say that the "perforated sealing disk mounted to reciprocate in the bore of said coupling member, means for yieldingly urging said sealing disk against the closed end of said first named coupling member, and means for limiting the movement of said sealing disk toward said second coupling member" as called for in Claim 3 is not present in the defendant's exhibit.

There is no reciprocating sealing disk in the coupler of defendant's Exhibit A and there is nothing to urge any sealing disk against the coupling member in that device as called for in claim 4 of the Gullborg patent.

Referring to Claim 5 of the Gullborg patent in suit, and particularly the cause "the bore of said coupling member being enlarged to provide a shoulder, a perforated sealing disk slidably mounted in the enlarged portion of said more, and a spring confined between the ends of said conduit and said disk for urging said disk toward said shoulder"; I will say that in the defendant's Exhibit A Coupler there is no such shoulder, disk or spring as called for in Claim 5.

Referring to Claim 6 of the Gullborg patent in suit, and to the language reading "a perforated sealing disk slidably mounted in the bore of said coupling member, and means for yieldingly urging said sealing disk toward the outer end of said coupling member, and means for limiting the movement of said sealing disk toward the outer end;" I will say that there are no such elements in the coupler of defendant's Exhibit A.

Referring to defendant's coupler Exhibits A and A-1, and to Claim 8 of the Gullborg patent in suit reading:

"The combination with an apparatus having a part to be lubricated, of a conduit for conducting lubricant to said [fol. 46] part, a coupling member secured to the end of said conduit and provided with a spring-pressed valve closure, means for supplying lubricant to said conduit comprising a receptable provided with a discharge outlet, a second coupling member connected with said discharge outlet, means for detachably uniting said coupling members, and means for sealing the joint between said coupling member and for removing excess lubricant from the adjacent ends thereof when said coupling members are uncoupled."

I will say that there is no means for removing grease from either of the coupling members. There is no such thing.

A sectional duplicate of defendant's Exhibit C was offered and introduced in evidence as defendant's Exhibit C-1.

The defendant's coupler of Exhibit A was applied to the defendant's fitting or grease cup Exhibit C.

Referring to defendant's Exhibits A, A-1, C and C-1 and to claim fourteen of the Gullborg patent in suit, I will say that I do not find "a grease cup comprising a tubular member having one end flanged inwardly to provide a closure seat, a closure, a pin extending through said tubular member and from both sides thereof, and a spring confined between said pin and closure, and tending to hold said closure on its seat." The type of valve in the fitting marked Exhibit- C and C-1 is a ball. I find a spring in this device at the end opposite to where the ball is found. The spring is not confined between the ball valve and the pin or the closure. There is no spring between the valve closure and the pin in that fitting.

Now referring to the same Exhibits A, A-1, C and C-1 and referring to Claim 15 of the Gullborg patent in suit I will say that there is no spring confined between the pin and the closure.

An Alemite pin fitting or grease cup of plaintiff's manufacture, recited in Claims 14 and 15 of the Gullborg Patent 1307734, was offered and introduced in evidence as defendant's Exhibit D.

A sectional duplicate of Exhibit D was offered and introduced in evidence as defendant's Exhibit D-1.

An Alemite coupler of plaintiff's manufacture made ac-
[fol. 47] cording to the Gullborg Patent in suit was offered and introduced in evidence as defendant's Exhibit E.

A sectional duplicate of Exhibit E was offered and introduced in evidence as defendant's Exhibit E-1.

The Alemite coupler of defendant's Exhibit- E and E-1 contains the spring-pressed and slidably mounted sealing member or washer, as defined in Claims 1, 2, 3, 4, 5, 6 and 8 of the Gullborg Patent 1307734.

Another defendant's coupler was offered and introduced in evidence as defendant's Exhibit B.

A sectional duplicate of Exhibit B was offered and introduced in evidence as defendant's Exhibit B-1.

The defendant's coupler of defendant's Exhibit- B and B-1 is provided with bayonet slot means for engaging the fitting and a sealing washer for the purpose of sealing against leakage of liquids passing through under pressure. There is a screw thread provided in the outer mem-

ber for the purpose of advancing the outer member by hand through the operation of that screw thread, and so, in turn, advancing the inner member with this sealing washer against the face of the fitting. Similarly, by reversing the operation, unscrewing the outer member, the seal is released and the coupling may be removed from the fitting. The sealing member of this coupler is a plain annular washer, apparently of leather, incapable of any sliding or reciprocating motion within the coupler, but fixed therein. There is no means for yieldably urging the sealing disc or leather washer in the coupling device of defendant's Exhibit B.

Defendant's coupler, of defendant's Exhibits B and B-1, does not contain a sealing disc or spring as called for in Claim 1 of the Gullborg Patent. Referring to Claim 2 of the Gullborg Patent, I find that the coupler of defendant's Exhibit B does not contain a perforated sealing disc mounted to reciprocate in the bore of the coupling member or means for yieldably urging the sealing disc against the closure end of the first named coupling member. Defendant's coupler (Exhibit B) does not have a perforated sealing disc mounted to reciprocate in the bore of the coupling member or means for yieldingly urging sealing disc against the first named coupling member, as called for in Claim 3 of the Gullborg Patent. The coupler (defendant's Exhibit [fol. 48] B) does not have a perforated sealing disc mounted to reciprocate in the bore of the coupling member or means for yieldingly urging the sealing disc against the end of the first named coupler nor as called for in Claim 4 of the Gullborg Patent.

Defendant's coupler, Exhibit B, does not have a perforated sealing disc, slidably mounted, in the enlarged portion of the bore or a spring confined between the ends of the conduit and disc for urging the disc toward a shoulder, as called for in Claim 5 of the Gullborg Patent.

Defendant's coupler, Exhibit B, does not contain a perforated sealing disc slidably mounted in the bore of the coupling member or means for yieldably urging the sealing disc towards the outer end of the coupling member or means for limiting the movement of the sealing disc towards the outer end as called for in Claim 6 of the Gullborg Patent. There is no means for removing excess grease from either of the coupling members of Defendant's Ex-

hibits B and C as called for in Claim 8 of the Gullborg Patent.

Referring now to defendant's Exhibits E and E-1, there is a sealing disc or cup leather capable of sliding within the enlarged part of the coupling and restricted within that enlarged part, and a spring as called for in Claims 1, 2, 3, 4, 5, 6 and 8 of the Gullborg Patent in suit.

Offered in evidence as defendant's Exhibit F, another form of defendant's coupler.

Offered in evidence as defendant's Exhibit G, another form of pin fitting.

Duplicate sectional models of defendant's Exhibits F and G were offered and introduced in evidence as defendant's Exhibits F-1 and G-1, respectively.

Referring to defendant's Exhibits F and F-1, and to Claims 1, 2, 3, 4, 5, 6 and 8 of the Gullborg Patent in suit, I find that there is no perforated disc slidably mounted, nor is there any means for removing excess lubricant from the adjacent ends of the coupling members when uncoupled, as variously recited in these claims.

The coupler of defendant's Exhibits F and F-1 consist of two main parts, one having an orifice and a bayonet slot for engagement with a fitting. The other part is mounted with a screw within the first part and contains a common leather washer which may be pushed up against the end of the fitting, as the coupling has been engaged upon the fitting. By the use of the screw thread a seal is effected [fol. 49] by the leather washer, between the coupler and the fitting. For removing the coupler, it is unscrewed and then removed from the fitting.

In the fitting of defendant's Exhibits G and G-1 there is no valve closure and there is no spring whatever as called for by Claims 14 and 15 of the Gullborg Patent in suit.

Upon cross-examination Mr. Hugo C. Gibson testified as follows:

I will say that the combination of an Alemite fitting of the Bassick Manufacturing Company, Exhibit D, and the compressor and coupler, Exhibit A of the Cumming affidavit is not described in Claims 1, 2, 3, 4, 5, 6, 8, 14 and/or 15 of the Gullborg Patent in suit. The reason for this conclusion is that if I were to try to make a device called for by Claims 14 and 15, I would not know very well what to

do. In order to do what this inventor wanted to do, I would have to turn to the drawings to find out how to do it, and I should turn to Figure 5 and do what is disclosed in Figure 5. I would find the arrangement of Figure 5 in the assemblage of apparatus before me.

I do not find in Claims 14 and 15 of the Gullborg Patent in suit any words or phrases which are not met by these devices before me. In my opinion, Claims 14 and 15 are not descriptive of the combination of Exhibit A of the Cumming affidavit and Exhibit D offered herein. I do not find any word or words in Claim- 14 and 15 of the Gullborg Patent in suit which are not descriptive of the combination of the pump and hose of Exhibit A of the Cumming affidavit; the defendant's coupler "A" submitted herein and the plaintiff's Gullborg Alemite pin fitting submitted herein as Exhibit D.

A drawing representing the defendant's Exhibits A and A-1 was offered and introduced in evidence as plaintiff's Exhibit A-2.

I do not find any word or words in Claims 14 and 15 of the Gullborg Patent in suit which are not aptly descriptive of the assemblage of apparatus of the pump and hose of Exhibit A of the Cumming affidavit; defendant's coupler of defendant's Exhibits B and B-1 herein, and plaintiff's Gullborg Alemite pin fitting, defendant's Exhibit D herein.

I find no word or words in Claims 14 and 15 of the Gullborg Patent in suit which are not descriptive of the assemblage of apparatus composed of the pump and hose [fol. 50] of Exhibit A of the Cumming affidavit; the defendant's coupler and defendant's Exhibits F and F-1 herein and the plaintiff's Gullborg Alemite pin fitting or grease cup, defendant's Exhibit D herein.

A drawing representing the defendant's coupler of defendant's Exhibits B and B-1 was offered and introduced in evidence as plaintiff's Exhibit F-2,

A device exemplifying the spring shackles and bolts of an automobile, to whose bearing a pin fitting such as Exhibit D was applied, was offered and introduced in evidence as plaintiff's Exhibit No. 1.

Offered in evidence as plaintiff's Exhibit 2 page eight of the 1927 catalog of the Larkin Automobile Parts Company of Dayton, Ohio.

The language of the order for the preliminary injunction in this suit is in part that the defendant be restrained from making use or selling certain devices, including the lubricating apparatus exemplified and identified in the affidavit of Cumming as Exhibit A, or any other device not manufactured by the plaintiff embodying the invention described and claimed in Claims 14 and 15 of the Gullborg Patent 1,307,734 or adapted to be used in systems or combinations embodying the same. It is my opinion that the couplers, defendant's Exhibits A, B, and F, if applied to the end of a flexible conduit or compressor such as Exhibit A of the Cumming affidavit, can be satisfactorily used in conjunction with the pin fitting exemplified by defendant's Exhibit D herein for the lubrication of a bearing.

It is my opinion that the couplers, defendant's Exhibits A, B, and F, would also be adapted for use in combination with the fitting of defendant's Exhibit C. When I refer to the Alemite lubricating outfit, I have in mind the equipment of the Bassick Manufacturing Company, the plaintiff herein.

I first became familiar with the pin fitting of Exhibit C within the past week.

Upon Redirect Examination Mr. Gibson testified as follows:

If I endeavored to learn the nature of the apparatus or combination described in Claims 14 or 15 of the Gullborg Patent in suit, I would first consider all the elements of this lubricating combination, as disclosed in the wording of the claim, and I would find no difficulty in constructing, either mentally or materially, "a grease cup comprising a tubular member, having one end flanged inwardly to pro- [fol. 51] vide a closure seat, and a closure, and a pin, extending through the tubular member and from both sides thereof, and a spring confined between said pin and closure." I could follow the instructions for disclosure of that claim very readily, either mentally or in materials and could construct a—a fitting, as described there, the description being clear enough to permit that. Then I could take or make a grease pump, or think of a grease pump, having a discharge conduit, yes, and I could mentally or materially make up all of the parts so far referred to, so that they would operate satisfactorily or be capable

or doing so. But here I come to an expression which says: "means co-acting with the ends of said pin for detachably connecting the discharge end of said conduit with said grease cup," and I would me at sea, for I would not know what to do. I could make up a lot of means, which would co-act with the ends of said pin, but I would not have a clear instruction as to how to make that up so that it would act properly as a lubricating means, which I would understand to mean—to be a means for pressing lubricant into the grease cup, that being what a grease cup is for, and if I hadn't any further instructions, I should certainly have to, or should certainly be liable to make a very inefficient, and improper and leaking device, which may not have the effect of getting the grease into the grease cup, against the pressure of the closure spring. Therefore, I should naturally have to turn to the drawings and see what the invention had disclosed there, in order to guide me and I should find there a very clear detail of the arrangement that the inventor had in mind, which would provide a means for co-acting with the end of said pin, etc. I should find that in figures two and five of the drawing, and if I followed those instructions or disclosures there, I could make an arrangement which would satisfactorily perform the lubrication desired. That is what I would do.

Stating some of the necessary and essential qualities or characteristics of the means co-acting with the ends of the pin of a pin fitting for detachably connecting the discharge end of the conduit with the grease cup, I may state that the object of a device is to lubricate—is to force lubricant into a bearing, it has always been essential that the joints of the device must be substantially grease tight; the tighter they are, the better the article for its purpose. And I would find that it was quite easy to have the grease cup tight against leakage of lubrication. The grease pump and the discharge conduit also could readily be tight, [fol. 52] using customary means, but where you come to the co-acting of the compressor device as a whole with the fitting or grease cup, you have a joint there which has—which would have to be made and unmade many times, and which would not require, in a matter of this kind—the lubrication of automobiles properly—and which would not require the services of a mechanic for the purpose of making a grease tight joint, so it would be essential

in this combination of parts to provide some means which would automatically, readily and without difficulty or even, I might say, conscious act on the part of the user, other than that to—of actually connecting the two parts together, the compressor outfit and the fitting—to have a part—to have an arrangement in there which would automatically make a tight seal. Not finding any indication or instruction as to how that should be done, why I would—as I said before, turn to the drawings and I would there be told, and in my own judgment I would see that the arrangement of the drawings would make such a tight seal, and I would find that that seal was accomplished by the use of a cup leather, with a perforation in it for the passage or grease evidently, and that cup leather is mounted in a recess or space which restricts its movement, so that once put in there, it would not easily fall out, and that cup leather has a spring arranged to press against the face of the flat portion of the cup leather, and the other end of that spring abuts against a fixed part of the coupling, so that the spring may exert its pressure upon the cup leather and normally to maintain its position toward the bayonet joint end of the coupling. The cup leather is so arranged then that when the coupling is engaged with the grease cup in the way shown here, that is by means of the bayonet slots in the coupling and the pins in the grease cup, the grease cup would have automatically moved the cup leather up and so compressed the spring, through its contact with the end of the grease cup. This cup leather would have made a spring-pressed, grease tight joint, between the coupling and the grease cup.

Now, on removing that coupling from the grease cup, the cup leather would return to its original position against a shoulder there in the coupler.

If I were to visualize or give a picture of the construction meant by "means co-acting with ends of the said pin for detachably connecting the discharge end of said conduit with a grease cup," recited in Claims 14 and 15, it would be the construction of Figure 2 and also part of [fol. 53] Figure 5 of the drawing of the Gullborg Patent in suit.

The characteristic structural features of the means disclosed in Figures 2 and 5 and described in the specification of the patent in suit, for co-acting with the ends of said pin, are the perforated cup leather and a spring pressing that

cup leather; assembled inside of an enlarged cylinderical bore of the main body of the coupler.

Upon Redirect Examination Mr. Gibson testified as follows:

In stating heretofore that there were no words in claims 14 and 15 which were not descriptive of each of the three different combinations of a pump, a flexible hose and a grease cup or fitting, of plaintiff's manufacture (defendant's Exhibit D) with one of the three new couplers, Exhibits A, B and F alternatively, I meant that the words of the claims in their abstract sense indicated an outfit somewhat on the lines of the assembly that I was asked about. I did not mean that in the practical sense of the words, that claims fourteen and fifteen were met by that combination.

Neither claim fourteen nor fifteen is readable upon those combinations, for the reason that none of those coupler exhibits have any such arrangement in their structure as is indicated in the drawings of the Gullborg patent in suit.

If I construed those words of claims fourteen and fifteen, which call for "means co-acting with the ends of said pin for detachably connecting the discharge end of said conduit", the only possible way I can construe them, by an examination of the disclosure of the same patent, then the three exhibitions placed before me of the pump, and the flexible hose, having at its free end, one of the three new coupler devices submitted by defendant (exhibits A, B and F,) would not come within the meaning of any one of these two claims and they wouldn't infringe them.

The screw thread of the defendant's coupler, or Exhibit B, was such that it would not connect or thread together with the screw thread on the end of the flexible hose or the pump and hose of Exhibit A of the Cumming affidavit. Defendant's coupler of Exhibit B and the pump and hose of Exhibit A Cumming affidavit could be connected together, however, by the interposition of a connector bushing having appropriate threads at each end to receive the coupler B and end of the hose respectively.

In my opinion the claims 14 and 15 of the Gullborg patent in suit, when construed in the light of the specification [fol. 54] and drawings of the patent, do not read upon the compressor, including the coupler of Exhibit A, Cumming

affidavit, in conjunction with the Alemite pin fitting, defendant's Exhibit D.

JOHN M. MCGREGOR, Plaintiff's witness:

My age is 37; I live at Memphis, Tennessee and am the distributor of Alemite products made by the Bassick Manufacturing Company. My territory comprises parts of five states, Kentucky, Missouri, Arkansas, Mississippi and Tennessee. I have met the competition of the R. M. Hollingshead Company, the defendant herein. The book handed to me shows various lines of equipment and fittings that we purchase from the Bassick Manufacturing Company and sell throughout the territory I have mentioned. The book has been identified as Exhibit H of the Otis affidavit herein. The books shows an Alemite service compressor, Model H-15 and a small horizontal service compressor, Model H-5a. It also shows a giant push gun, Model 1000 and an Alemite portable pneumatic service compressor, another pneumatic compressor and an Alemite handy shop gun.

The pneumatic compressor marked "High Pressure Chassis Lubricator, the R. M. Hollingshead Company, Camden, New Jersey, U. S. A.", which was purchased by Mr. Cumming and marked Exhibit A is practically the same as our Alemite Handy Shop Compressor shown in the Alemite price list. It is intended for the same purposes and uses.

This larger Hollingshead equipment, equipment purchased by Mr. Beezley, is being sold in competition with our Alemite H-15 compressor. It has a connection that is suitable for fitting on our Alemite fittings. The Bassick Alemite fitting and coupling comparable with the two Hollingshead devices in evidence are sold to practically every automobile and service station of every size. Various mills, bottling companies, concrete mixers, dredging machines and others have our system of lubrication. The service compressors are not ordinarily sold to people who have only one automobile to grease. The two types of equipment in question are sold ordinarily to service stations or car dealers, who have a lot of cars to Alemite. The cars to be greased are equipped at the factory with Alemite pin fit-

ting, the product of the Bassick Manufacturing Company. The Alemite system is installed on every automobile sold [fol. 55] in this territory with the exception of the Ford, Hudson and Essex. These cars do not have any high pressure system of lubrication installed upon them. Grease-cups are provided on the Ford and oil cups on the Hudson—I mean old-fashioned grease cups and oil cups. None of the devices here involved can be used with the lubricating equipment on Ford, Hudson or Essex cars. All other cars equipped with lubricating fittings can be serviced with the Hollingshead service compressors in competition with the service compressors of the Bassick Manufacturing Company which I sell. All of the Alemite fittings which we sell are provided with a ball and spring. The devices in evidence as defendant's Exhibits G and G-1 are not provided with any valves whatever for closing the openings there through. In my opinion such articles are not commercially useful, or feasible to be used in lubrication in conjunction with high pressure compressors for the reason that there is no ball to prevent the lubricant, first, from coming back, or the dirt and grit from getting into your bearings.

Cross-examination:

Ford cars are equipped with grease cups and have been for twenty years. Hudson and Essex cars are equipped with oil cups. There is no provision made on a Ford car to screw in an Alemite pin fitting in the shackles. There are six bearings on a Ford car which are equipped with grease cups. There is an oil hole provided at each shackle on a Ford car in which a little device for the purpose of placing oil on top of the bearing. There is a cover to keep the dirt out and it must be opened to put the oil in and is closed automatically. The little reservoir to hold the oil is raised above the bearing one-eighth or one-fourth of an inch and has a little closure on it.

On Hudson and Essex cars, with which I am also familiar, there are oil cups provided for the purpose of retaining a certain amount of oil that is gradually fed into the bearing. At least that is the theory of it. Most of the Hudsons here are equipped with the Alemite system. I have lubricated the spring shackles of Hudson and Essex cars but we only lubricate them with Alemite, we don't use the oil cups. If an owner of a Hudson or Essex car with oil cups wanted

his car lubricated we would do so by inserting oil in the cup. We would not have to remove any part of the cup. The oil is supplied by an oil can being placed in the oil cup. I have no actual knowledge as to the percentage of [fol. 56] Hudson and Essex cars equipped with Alemite lubricating equipment but we sell a great many systems for Hudson and Essex cars. This equipment is sold to the Hudson and Essex dealer at Memphis, which is the largest one we have in our territory. They buy ten or fifteen sets of Alemite for either Hudson or Essex cars at the time. By a "set of Alemit-" I mean 31 pin fittings. In some cases the dealer buys them in bulk and in some cases they are put up in sets in cotton bags, so many fittings for each car. Before applying the fittings which are purchased from us in bulk or in sets the oil cups are first removed. The Hudson-Essex agency has as part of their shop equipment two of our complete lubricator equipments, type H-15, which includes a grease tank holding fifteen pounds of grease, which is enough for a good many cars. To the grease in the tank, pressure is applied by a proper operating lever on top. The grease goes through a flexible hose into the coupling member. I would say that the lubricating units comprise a tank or reservoir for holding a supply of grease, pump, flexible hose and coupling on the end of the hose. In some instances the Hudson-Essex agency purchased fittings and equipment complete and in other instances they bought only the fittings. Although I stated that outside of Ford, Hudson and Essex cars all other cars are equipped with Alemite, there may be a few other cars that do not represent any appreciable amount of the total number of cars that are not so equipped, but practically every other car that is sold here in any large number is equipped with Alemite system of lubrication.

I would not say that the Alemite Zerk system is in every way similar to the Alemite bayonet coupling system. The only thing in common is that it accomplishes the same thing only in a different way. I know of other cars equipped with the Zerk system:—Buick, Dodge, Chrysler, Reo.

I always refer to "Alemite" as being either the Alemite or the Alemite-Zerk type, and qualify my statements to the extent that I was referring to both systems in general. As a matter of fact Ford cars, Hudson cars, Essex cars, Chrysler cars, Buick cars, Dodge cars and Reo cars are not

equipped with the lubricating system of the Gullborg patent.

I stated that the grease cup or fitting of defendant's Exhibit- G and G-1 would not be practical for the reason that there is no provision made for holding the lubricant in the bearing and because there is no provision to exclude [fol. 57] dust and dirt and grit that naturally accumulate and work into the bearing.

The ball check valve in the Zerk fitting is approximately half way down the fitting and there is a small passage way leading to the check valve from the mouth of the fitting.

We find, by having the ball check valve approximately half way down the fitting which opens when the compressor is attached to it, that it automatically closes upon the removal of the compressor and the lubricant is not forced out. There is a small volume of lubricant left over the hole that keeps the dirt and grit from entering the fitting proper.

We recommend Alemite lubricant for use with the Zerk system, but various kinds of lubricants are used. I would refer to the lubricant as a light grease which will not flow. The Zerk fitting is filled with the lubricant to the very mouth of the opening which is sealed with a film of lubricant. The only possible entrance of grit would be that small amount which collects on the outer surface of that remaining lubricant.

The opening in defendant's Exhibit G is approximately the same size as the mouth of the Zerk fitting.

There are a good many industrial machines which are not originally equipped at the factory with the Alemite system but merely with old-fashioned grease cups and I have sold to a good many the Alemite system. These old fashioned grease cups are threaded into the machines by either a one-eighth or one-quarter inch screw thread. The bearings are provided with internally threaded openings with a standard one-eighth or a standard one-quarter inch pipe thread. The majority of these bearings are threaded with a one-eighth inch thread. The majority of the Alemite fittings are threaded with a one-eighth inch standard pipe thread.

The garage men or service men, to whom we sell our lubricators including the tank, pump, hose and coupling for lubricating cars equipped with our fittings, lubricate many different cars day in and day out. He may lubricate

with it a car from California, another one from Memphis and a third one from New York or from wherever it happens to come, and he may never lubricate the same car again.

I would say where the system is applied to stationary machinery, such as baking machinery or the like, the compressor stays there. The stationary machinery and the lubricating equipment would remain in one place all the time.

[fol. 58] Redirect examination:

I point out in connection with the Zerk type fitting shown on page 11 of Exhibit H price list that there is a spring actuated ball check valve somewhere nearly half way between the end of the ingress end and egress end of the fitting and that the ball check valve closes as soon as the lubricant has been forced into the bearing. In the Zerk type fitting the spring between the ball check valve and the ingress end of the fitting is left filled with the grease and the grease continues to fill that space because the check valve holds the grease in in that place and the dirt cannot get in. The fitting marked defendant's Exhibit G contains no valve of any kind. By vibration or otherwise the grease would work out of the fitting so that there would — a space within the fitting into which grit and dust might work. In that respect it is different from the Zerk fitting.

Recross-examination:

The ball in the Alemite Zerk fitting prevents the grease from coming out beyond the ball check valve.

The grease cup of defendant's Exhibits C and C-1, containing a ball check valve, would prevent the grease from coming out and the dirt entering the fitting if the ball were to become closed immediately upon removing the gun, like the present fittings we use.

I imagine that the ball of the defendant's fitting Exhibits C and C-1 would in fact set when the pressure was removed.

I imagine that the ball check valve in the defendant's fitting (Exhibits C and C-1) would come back like the ball in our Alemite fittings and would prevent the grease from coming out and prevent the dirt and dust from getting in.

We have sold our fittings for replacing broken fittings. We haven't any way of determining to what use our fit-

tings are going to be put, but we do know a certain proportion are broken off and a certain proportion of them are lost.

Offered in evidence as plaintiff's Exhibits 3-A, 3-B, 3-C, and 3-D, Volumes 1, 2, 3 and 4 respectively, of the printed record before the Court of Appeals for the Sixth Circuit in Bassick Manufacturing Company vs. Larkin Automotive Parts Company.

Offered in evidence as plaintiff's Exhibits 4-A and 4-B, volumes 1 and 2 of the printed record before the United [fol. 59] States Circuit Court of Appeals for the Sixth Circuit in the case of Bassick vs. O. K. Manufacturing Company, et al.

Offered in evidence as plaintiff's Exhibit 5 a printed copy of the record in the United States Circuit Court of Appeals for the Sixth Circuit in the case of Lyman vs. Bassick and Peerless v. Bassick.

Offered in evidence as plaintiff's Exhibits 6 and 6-A, volumes 1 and 2 of the printed record before the United States Circuit Court of Appeals for the Seventh Circuit in the case of Larkin v. Bassick.

Offered in evidence as plaintiff's Exhibit 7 a copy of the Larkin Co. 1926 catalog constituting Exhibit No. 154 in the matter of Bassick Manufacturing Company v. Larkin, Appeal Number 3823 in the United States Circuit Court of Appeals for the Seventh Circuit.

Offered in evidence as plaintiff's Exhibit 8 a copy of the opinion of the Sixth Circuit Court of Appeals in Bassick v. Lyman, et al.

Offered in evidence as plaintiff's Exhibit 9 the opinion of the Circuit Court of Appeals for the 7th Circuit in Larkin vs. Bassick.

Offered in evidence as plaintiff's Exhibit 10, volumes 1 and 2 of Bassick Company's adjudication books containing the opinions and decrees in suits involving patents covering Alemite lubricating equipment.

Offered in evidence as plaintiff's Exhibit 11 brief of R. M. Hollingshead as amicus curiæ in the matter of Bassick v. O. K. et al, pending in the Court of Appeals for the Sixth Circuit.

Offered in evidence as plaintiff's Exhibit 12 brief in answer to the brief of R. M. Hollingshead as amicus curiæ in Bassick v. O. K. et al.

Offered in evidence as plaintiff's Exhibit 13 copy of brief on behalf of plaintiff appellee as to validity of the patents in suit in the matter of Larkin v. Bassick, in the United States Circuit Court of Appeals for the 11th Circuit, Appeal number 3833.

[fol. 60] IN UNITED STATES DISTRICT COURT

REPORT OF STANDING MASTER ON ORDER OF REFERENCE OF APRIL 20, 1927—Filed Oct. 15, 1927

To the Honorable Harry B. Anderson, Judge, etc.:

Pursuant to the order of reference made and entered in this cause on the 20th day of April, 1927, at a stated term of this Court, held in the City of Memphis in said District, whereby I was directed to report in regard to the question whether or not certain devices or similar devices constitute infringements of any of the claims of the Gullborg and Zerk Patents, both as to matters of fact and in matters of law. In accordance with petition of the defendant, filed on April 20, 1927, and Supplemental Petition filed on May 2, 1927, I A. G. Riley, Standing Master, do respectfully report that I have proceeded to investigate the matter so referred to me; that I set apart a suitable time to hear the matters in controversy and that I have been attended by the parties and their respective counsel of record.

I

Plaintiff, at the beginning of the hearing, offered several objections to the proof before the Master. While I am of the opinion that I have no jurisdiction to pass upon the objections, I will rule on them because presented and argued, and in order that the parties may take advantage of the same if deemed appropriate.

(1) The first objection is that under the equity rules the parties are entitled to a hearing by the Court, rather than before a Master, citing the recent case of Los Angeles Brush Manufacturing Company vs. James. The Court, doubtless is, and the Master is, familiar with that decision. It is no part of the power of the Master to consider the validity of an order of reference, and the Court, in spite

of that decision, entered an order of reference, and, therefore, sufficient and compelling reasons must have existed. A motion to revoke the order of reference would be quite the correct method to raise this question. The objection is overruled by me as being without the limits of my authority and jurisdiction.

(2) The second objection is that the defendant had been granted and allowed an appeal from the order awarding the preliminary injunction, and that neither the Court nor the Master has jurisdiction to consider the matters referred.

A motion to revoke the order of reference would aptly [fol. 61] test the question. The record on the hearing, however, does not disclose the perfection of the appeal. It is the filing of the bond and perfection of the appeal that ousts the jurisdiction of the District Judge and transfers it to the appellate court, and at the hearing this had not been done.

Then, again, it is doubtful whether an appeal from an order awarding a preliminary injunction would prevent the consideration of the questions presented by the petitions referred to the Master, as they present matters wholly new, collateral and extraneous to the record, and do not seek to modify, attack or reverse the decision of the court on the preliminary injunction, but recognize its validity and binding effect, and would seem, under the decisions of this court, proper to be considered after an order of either a preliminary or permanent injunction. However, the Master has no power other than to overrule the objection, and it is accordingly done.

(3) The third objection is that the matters presented by the defendant involve questions too remote and too far-removed from the questions which the court has already considered and which the proofs cover to be considered in this proceeding and without a new suit or a new proceeding. As was pointed out in the case of Kalamazoo vs. Proudfit Loose Leaf Company, cited by the plaintiff, such questions "can be safely left to the discretion of the (trial) court." The same rule, however, controls the action of the Master. I have no power or authority other than to execute the order of reference. The question rests solely for determination with the District Judge. The objection necessarily is overruled.

II

The matters for consideration by me are controlled by the Order of Reference requiring me to report both as to matters of fact and in matters of law whether the devices submitted to the Court or similar devices which may be submitted before me, constitute infringements of any of the claims of Gullborg or Zerk Patents.

The plaintiff insists before me that the consideration of the device or devices known in the record as a "pin fitting," is unwarranted as being too remote and too far-removed from the issues joined in the original cause, that the plaintiff had not charged the defendant with infringement of the manufacture, sale or use of any sort of pin fitting. As pointed out, the question has been referred to me by the District Judge and I am bound. Certain pin fittings were [fol. 62] presented and filed with the original and supplemental petitions and the order of reference followed. Thus the ruling on the objection reserved at the hearing as appearing on page 112 of the transcript of the proceedings before me is overruled, as I am bound by the terms of the order of reference. That issue must necessarily be decided by the Judge in a proper proceeding, e. g. a motion to revoke or modify the order of reference.

III

Under the original and supplemental petitions the defendant submits a device known as a coupler and marked Exhibit "A." A section of the same device is introduced and marked Exhibit "A-1."

This device, or "coupler," and its functions are described by the expert witness, who was qualified without objection and whose qualification was in fact admitted, as a structure which consists of a main body, external screw-threaded and a cap or end piece co-operating with the screw thread so that the whole may be assembled. In the cap there is a hole and slot which accommodates and permits co-action with a fitting. The method of co-action is upon inserting or placing the complete coupling upon the fitting and turning the coupling around upon the fitting. The two ends which stand out from the side of the fitting engage with an internal screw thread or cam which has upon its surface serrations or projections readily disposed for the purpose of engaging the projecting pegs of the fitting and

preventing the easy unscrewing of the coupler from the fitting. A plain flat annulus or circular flexible leather washer or gasket is inserted in a hollow provided in the end of the main body of the coupler, which washer is in a fixed position and is incapable of any sliding, reciprocating movement. As a coupler is screwed upon the fitting the main bodies of both approach and the surface of the fitting, containing a valve is brought into contact with the washer, the object being to secure a tight joint between the end of the fitting and the body of the coupler, so that if material under pressure is applied to the passage through the coupler it will not leak from the joint made by the washer or gasket, while the serrations on the surface of the interior interrupted screw thread are sufficient to prevent the complete coupler from inadvertently becoming detached from the fitting, yet the coupler can be disconnected from the fitting by hand effort. That the only result of the union of the coupler and the fitting would be to squeeze the washer, [fol. 63] make it thinner thereby, but forming the seal against leakage. There is no spring or any resilient means within the coupler whereby the washer can be made to slide within the coupler, the washer must remain in its fixed position.

The coupler device in Gullborg Patent 1,307,734, is described in claims 1, 2, 3, 4, 5, 6 and 7 (so far as material to the question of patentability, invention and infringement) as "a perforated dealing disk slidably mounted in the enlarged portion of said bore, or mounted to reciprocate in the bore of said coupling member and a spring confined between the ends of said conduit and said disk for urging said disk against said first-named coupling member, or means for yieldingly urging said sealing disk against the closed end of said first-named coupling member." Claim 8 is aptly described as "means for sealing the joint between said coupling member and for removing excess lubricant from the adjacent ends thereof when said coupling members are uncoupled." That these are true and accurate descriptions are substantiated from an inspection of the devices introduced in the record, the testimony of the expert witness, introduced by defendant, and the opinion of Judge Denison, 18 Fed. (2d) 29, page 35, holding: "Gullborg substituted a cup-shaped perforated washer, which was spring-pressed into sealing contact with the head of the fitting." Gibson

testified that the new device submitted by the defendant had none of the novel elements of the Gullborg Patent. It has also been strongly urged and argued by counsel. I have no difficulty in agreeing. Devices "A" and "A-1" have a plain, flat sealing washer or gasket and which is rigidly and fixedly supported in one end of a tubular metallic member, which is rendered incapable of sliding and is not actuated or yieldingly urged by a spring or any resilient element.

Thus, I find as a matter of fact, that this device Exhibit "A" is not an infringement of the claims of the Gullborg Patent.

IV

Under the original and supplemental petitions the defendant submits a device known as a coupler and marked Exhibit "B", a section of the same device is introduced and marked Exhibit "B-1."

This device or coupler, and its functions, are described by the witness introduced on the hearing as provided with bayonet slot means for engaging the fitting and for the pur- [fol. 64] pose of sealing against leakage of the liquids passing through under pressure.

There is a screw thread provided in the outer member of the coupler for the purpose of advancing the outer member by hand, and so, in turn, advancing the inner member with the sealing washer against the face of the fitting. Similarly, by reversing the operation, unscrewing the outer member, the seal is released and the coupling may be removed from the fitting. The sealing member of the coupling device is a plain, annular washer, apparently of leather. The leather washer is incapable of any sliding or reciprocating motion within the coupler. It is in a fixed relation to the coupling and there is no possibility of its moving from the recess in which it is placed. There are no yieldable means or spring for yieldingly urging the sealing disc or leather washer in the coupler and no means for influencing the washer in any way, except insofar as it will be compressed when the coupler is tightened down upon the fitting.

The coupling device in Gullborg Patent, 307,734, was fully described by me under Section III in considering the elements of defendant's coupler Exhibit "A." The element or elements of novelty and invention were clearly set forth in the opinion of Judge Denison and are clearly understood by all parties interested in the cause.

The witness testified that the new device, Exhibit "B", submitted by the defendant, contained none of the novel elements of the Gullborg Patent as set forth in claims 1, 2, 3, 4, 5, 6 and 8.

Upon the proof and a careful consideration of the entire record I have no difficulty in distinguishing essential differences between the devices. Device Exhibit "B" contains a gasket-supporting tubular member, and on the coupling end has an annular perforated flat "gasket" fixedly mounted. This tubular member is encased in a member that may be termed a "coupling sleeve," which rotates freely around it. This "sleeve" is made in two parts; first, a "bayonet-slotted" part that engages the "fitting" and, second, the larger of the two, which may be termed the "handle part", both connecting in an adjustable manner by the means of a "screw thread" interlocking so that a rotation of the "handle" member of the sleeve will draw the "bayonet-slotted" member to it, thereby drawing the gasket in the free end of the tubular gasket-supporting member tightly against the end of the "fitting."

Thus, there is a clear field of difference in the two de- [fol. 65] vices. It is argued by counsel that it should be characterized as a solid gasket and "screw thread union," with permitted use as held by Judge Denison. The differences are marked and I can see no element of novelty or invention common to both.

Thus, I find as a matter of fact, that defendant's Exhibit "B" is not an infringement of the Gullborg Patent.

V

Under the original and supplemental petitions the defendant submits a device known as a coupler and marked Exhibit "F," a section of the same device is introduced marked Exhibit "F-1."

This device or "coupler," and its functions, are described by the witness introduced on the hearing as consisting of two main parts, one having an orifice and a bayonet slot for engagement with a fitting; the other main part with a screw within the first part and contains a common leather washer which may be forced up against the end of the fitting by the use of the screw thread, thereby a seal is effected by the leather washer between the coupling and the fitting; to reverse it the part of the coupling containing the washer is

unscrewed and the coupling removed; that the tightening of the seal or the squeezing of the washer by the screw action of the main part is accomplished by hand. The witness further states that in the construction of the device there cannot be found anywhere an embodiment of the structural elements defined in Claims 1, 2, 3, 4, 5, 6 and 8 of the Gullborg Patent by such restrictions and limitations as a "perforated sealing disc slidably mounted, and a spring confined between the ends of said conduit and said disc."

That this is true needs but an inspection of the device, and my examination of it confirms the description. The means for effecting the seal between the fitting and this coupler is a flat annular leather washer or a flat sealing gasket, which is rigidly and fixedly supported in one end of the tubular metallic gasket-supporting member or "screw head." The washer or gasket is incapable of sliding and is not actuated or yieldingly urged by any spring or like resilient element, which characteristic or element is the novelty of the claims of the patent, as held by Judge Denison.

This device is identical in structural characteristics with the other two couplers submitted and should be classed as a "solid gasket" and "screw-thread union."

The difference between the coupler of the Gullborg Pat-[fol. 66] ent and this device is marked, and I can see no element of novelty or invention common to both. Thus, I find as a matter of fact that defendant's Exhibit "F" is not an infringement of the Gullborg Patent.

VI

Under the original and supplemental petitions the defendant submits a device known as a "pin fitting" and marked Exhibit "C", a section of the same device is introduced and marked Exhibit "C-1."

This device or "pin-fitting," and its functions, can be described as a tubular body, one end externally threaded to fit a standard ⅛" pipe thread; at the other or free end thereof, a bayonet pin is extended through the body with the two ends of the pin projecting a suitable extent on either side providing the bayonet projections or lugs of the bayonet connection; an internal valve seat at its upper or free end and a corresponding closure or ball check-valve,

which closure is carried by a "U" shaped member which straddles and extends below the bayonet pin, which "U" shaped straddler in turn is yieldably carried by a spring positioned below the bayonet pin, the lower end of the member furnishing the abutment for the spring. This spring is not confined between the bayonet pin and closure.

The witness introduced at the hearing compared the device with the structures set out and described in claim 14 of the Gullborg Patent, and stated that the device did not correspond with a grease cup comprising a tubular member having one end flanged inwardly to provide a closure seat, a closure, a pin extending through said tubular member from both sides thereof and a spring confined between said pin and closure and tending to hold said closure on its seat; that the device had a ball-bearing valve co-operating with a spring but that it was disposed at the end of the tubular body to the valve and was not confined between the bayonet pin and the ball valve, or the closure. The same statement was made in connection with claim 15 of the Gullborg Patent.

In the opinion by Judge Denison the patentable novelty of Gullborg's Patent form of pin fitting was held to be that the pin which furnished bearings for the slot was made to pass through the fitting and furnish an abutment for the valve closing spring; that it is only that complete combination that can be patentable. When the pin becomes mere arms projecting from each side and the spring abutment [fol. 67] is otherwise furnished, it is only the common bayonet pin member.

This device is exactly identical with the Gullborg pin fitting in all particulars, except that the bayonet pin does not furnish the spring abutment, but the lower end of the pin fitting proper furnishes it and the spring is below the pin instead of being above it. A straddle member is used for this purpose. The invention and patentable novelty of the Gullborg Patent is clearly limited and is but an improvement upon an already common device. The functions performed by the two are identical and they are equivalent. In view of the fact, however, that the Gullborg Patent has been limited to the use of the transverse pin as the spring abutment, I find, as a matter of fact that defendant's Exhibit "C" is not an infringement of the Gullborg Patent.

VII

Under the original and supplemental petitions the defendant submits a device known as a "pin fitting," marked Exhibit "G," a section of the same device is introduced and marked Exhibit "G-1."

This device or "pin fitting," and its functions can be described as a tubular body or member, one end externally threaded to fit a standard ⅛" pipe thread. At the other or free end thereof, a bayonet pin is extended through the body with the two ends of the pin projecting a suitable extent on either side, providing the bayonet projections or lugs of the bayonet connection; a small aperture in the free end for receiving lubricating material, and lacks any valve and closure seat as well as any corresponding valve or closure for said aperture. It contains no spring of any character to co-act with a closure, nor does it have the free end flanged inwardly to provide a closure seat.

The witness introduced at the hearing compared the device with the structures set out and described in claims 14 and 15 of the Gullborg Patent and stated that it did not contain a closure or a spring confined between the closure and the pin, or in fact a closure, valve or spring.

This device or pin fitting is apparently a very common bayonet pin member or pin fitting, of no novelty or patentable invention and of very little commercial value or use. A mere inspection of this device discloses its simplicity and its common construction and use.

I find, therefore, as a matter of fact, that defendant's [fol. 68] Exhibit "G" is not an infringement of any of the claims of the Gullborg Patent.

VIII

The findings of fact reached by me are practically without dispute on the record, as the plaintiff at the hearing or in brief has not seriously contended that the devices submitted by the defendant are infringing in structural and mechanical form on the claims of the Gullborg Patent. The couplers introduced entirely lack the suction-producing function and it was this feature of the invention that gave much of the validity to the Gullborg Patent, as held by Judge Denison.

I have given this record most careful consideration owing to the questions of law and the large property rights involved, and have read and re-read it, hoping to arrive at the controlling issue or issues of fact and principles of law. The questions involved are not simple or easy of solution, but are difficult and complicated. The matter has been referred to me to find the facts and to report the law and I conceive it my duty under the order of reference to report the principles of law upon the facts found by me. Elaborate briefs have been filed by both parties and I have been compelled to give them assiduous consideration due to the fact that there is a sharp dispute between the parties of the opinion of the court in Lyman Manufacturing Company v. Bassick Manufacturing Company, 6 C. C. A. 18 Fed. (2d) 29, and that opinion, together with the opinion of the trial court, constitutes the law of the case as far as applicable to the facts found by me, and is controlling.

IX

It is insisted by the defendant that this reference is but one part of a collateral proceeding brought by the defendant and the question is whether or not the defendant is at liberty to make, sell, and/or use certain new devices in lieu of devices held by the court to have infringed claims 1, 2, 3, 4, 5, 6, 8, 14 and 15 of the Gullborg Patent, and the particular question before me is whether or not the new devices in themselves, or a lubricating system per se comprising them would infringe any of said claims. This question, it is insisted, should be answered by me by merely comparing the mechanical construction of the new devices or systems with the mechanical structures recited in each of said claims. [fol. 69] Thus, presenting a pure question of fact to be determined by me.

It is then insisted that if I should find that the new devices or a system comprising them per se are found as a fact not to infringe, then the question of law involved will be decided by the court upon briefs, pursuant to a motion now pending to modify the preliminary injunction; though counsel do construe, with some hesitation, the order of reference to empower me to report my conclusions of law insofar as they relate to the new devices. I do not conceive any escape from the necessity of reporting on matters of law arising upon my findings of fact. It is true

that my report must of necessity be confined solely to the new devices, or to a lubricating system comprising these new devices, to-wit: Coupler devices "A", "B" and "F", and fitting devices "C" and "G"; and not to any other devices or systems, and I have not considered the "mixed" or "mongrel" systems so designated by defendant and severely criticised both at the hearing and in brief, presented at the hearing by the plaintiff, except insofar as such evidence or presentation elucidates the facts or reflects in a measure the law controlling the use of the new devices of the defendant.

X

A rather novel presentation of the devices submitted by defendant has been made before me in the brief. At the hearing the devices, as separate units, were alone submitted for my consideration, but in brief they are coupled together into a so-called system and my decision urged in that aspect. It will thus be seen that the order of reference is broadened on the facts for there was referred to me the consideration of the new devices filed with the petitions, similar devices that may be submitted, and no "system" or "combination" of devices was referred. The plaintiff has not criticised this presentation of the devices and I will therefor so consider them, so that in a proper manner the parties may have advantage of my findings.

The new device or "system of lubrication" is made up, as insisted by the defendant, of

1. Any grease gun (of any old construction).

2. Any hose (of any old and well known construction).

3. One of the three new "coupler" devices, "A", "B" (and "F", attached to the free end of the hose).

[fol. 70] 4. Either one of the two new "pin fitting" devices (Exhibit "C" or "G", cooperating with one of the "coupler" devices).

From these five new devices the defendant has theoretically constructed and exemplified six combinations or systems for lubricating means and has pictorially illustrated the same by six charts numbered from one to six.

It is urged that the defendant's couplers are of the "screw thread" and "gasket union" type, comprising a

fixedly mounted solid or flat perforated washer or gasket adapted to be pressed against the end of the fitting by a screw thread in the coupler; that the defendant's pin fittings are of the bayonet type, comprising a tubular body, a bayonet pin serving only to form opposed lugs for engagement with a bayonet coupler, said pin fitting having no valve-closing spring, supported by the bayonet pin or confined between the valve closure in the end of the fitting and the bayonet pin; that Gullborg's contribution to the old prior art was merely a specific construction in a "coupler" and a "fitting," making no claim to any specific construction in the compressor and hose. And it is true that Judge Denison held that Gullborg contributed but a specific improvement to the relatively generic patent of Winkley, the improvement pertaining to the form and resultant functions of Winkley's spring-pressed element for completing the seal, Gullborg substituting a cup-shaped perforated washer, spring-pressed into sealing contact with the head of the fitting instead of Winkley's cup, with top and sides complete, with the result that two additional functions were gained, first, that as the initial sealing was effected by the spring pressure it was intensified and made more effective by the pressure developed in the liquid itself; second, that by reason of the peculiar shape of the sliding member after it had been by the pressure of the fitting pushed up a substantial distance upon the dis-union of the parts the spring would throw it sharply down to its position of rest leaving a vacuum behind it, and an upward inrush of air into this vacuum through the restricted opening would create a suction which would pull up into the opening the grease which at the moment of dis-union had been below the opening and which otherwise would smear up the parts and impair the cleanliness of operation.

In respect to the pin fitting, Judge Denison held that Gullborg's pin fitting provided for the same pin which furnished bearings for the slot to pass through the fitting [fol. 71] and furnish an abutment for the valve-closing spring and that it is only this complete combination that can be patentable, that when the pin becomes merely arms projecting from each side and spring abutment is otherwise furnished it is only the already common bayonet joint member.

Defendant insists that each of its three new coupling devices have a plain, flat sealing gasket, stationarily and fixedly supported in one end of a tubular screw head, incapable of sliding and not actuated or yieldingly urged by any spring or like element, as called for by the language of each of claims 1, 2, 3, 4, 5, 6, 7 of the Gullborg Patent. And this is true as a matter of fact.

Similarly, defendant insists that one of its two new pin fittings has its spring positioned entirely below the bayonet pin and not confined between the pin and closure, as recited in claims 14 and 15 of the Gullborg Patent, while the second pin fitting not only lacks a spring but also lacks any valve or closure seat, as well as any corresponding valve or closure whatever, as recited in claims 14 and 15 of the Gullborg Patent. And this is true as a matter of fact.

Therefore, the defendant argues that its three couplers lack the fundamental patented feature of the Gullborg Patent, viz. a perforated cup leather sealing disc or gasket slidably mounted and yieldably urged outwardly by a spring with its novel and patentable functions heretofore described, but are of the screw thread and gasket union type; and that its two pin fittings lack the only novel and patentable structural feature of the Gullborg system in that one fitting has no valve seat, valve, or supporting spring at all and that the other has its valve or closure supported by a spring resting or abutting not on the cross or bayonet pin but on the base of the fitting.

This is the argument presented by defendant urging that the manufacture, sale or use of the new devices or a system comprising them would not infringe the plaintiff's rights under the Gullborg Patent, either in view of the scope of the claims 1, 2, 3, 4, 5, 6, 7, 8, 14 and 15, as determined by the language of the respective claims, or as determined by the construction of them by Judge Denison.

This is the crux of the question and it is not easy of solution, but formidable. The invention is novel or rather the method of use of the patented structures making up the terms of the patent are unusual, in that the pin fitting is detached from the compressor (meaning the complete [fol. 72] structure, including hose and coupler), and is attached to an automobile bearing or any other bearing to be lubricated and is not brought into a complete assembly until the compressor is attached to it, and it is then that the

invention is brought into full use, and all alleged infringements of the claims of the patent must be construed as of that time or moment. As was said by Judge Denison in Lyman Mfg. Co. v. Bassick Mfg. Co., supra, at page 33:

"The device is for the purpose of forcing lubricant into an interior bearing, and the situation at the moment of use must determine the character of the association of the parts."

It is true that the quoted expression was used on the question whether or not the Winkley patent was a true combination or a mere aggregation. It was held to be a combination. The claims of the Gullborg Patent all recite a combination of the various elements and these claims were held valid in that case, at least as I understand it, claims 1, 2, 3, 4, 7, 8, 14 and 15 were in issue and held valid, while 12 was held invalid for lack of novelty.

Defendant vehemently argues and insists that I should not consider the new parts in combination with or in relation to any other device or system, especially with those of the plaintiff under the Gullborg Patent, but should treat them separately and apart and unto themselves, and so reporting the findings of fact the ultimate solution of infringement should rest with the District Judge upon the defendant's motion now pending to eliminate from the order of injunction the phrase or expression, "or adapted for use in systems or combinations embodying the same," the same meaning the invention described and claimed in claims 1, 2, 3, 4, 5, 6, 8, 14 and 15, claim 12 thereafter being held invalid, of the Gullborg Patent.

I cannot ascribe to this method for the solution of the intricate matters pending before me on this reference, but feel it incumbent to report findings of law upon the facts found by me to be established and reported herein. I may add parenthetically that doubtless the motion to modify the injunction by eliminating the above-quoted clause will involve the identical principles of law, but of that I have no concern or authority. It is but a coincidence.

This defendant stands convicted on this record of having [fol. 73] heretofore infringed the claims of the Gullborg Patent in suit and is now under a preliminary injunction prohibiting further violation. The record shows the character of the business of the defendant and the method by

which that business has been transacted. The record made before me does not disclose an intention to change the method of transacting that business and I feel at liberty to indulge the presumption that the defendant is engaged primarily in the sale of automobile accessories and also largely in the distribution of lubricating material. It is not likely that it will engage in the manufacture of equipment for the lubrication of automobiles in direct and open competition with the plaintiff, making and manufacturing a system or systems of its own, using elements and means now belonging to the public and residing in the public domain. Without relating the facts in detail leading to this conclusion, for they are well established, and the parties are fully cognizant of them, having been established in this cause both before the trial judge and before me, and reviewed in the case of Lyman Mfg. Co. v. Bassick Mfg. Co., supra, I find as a matter of fact that the defendant has submitted the new devices and will in the future use them under the same conditions as the old devices, and that the new devices or a system comprising them are designed, intended and adapted for use inter-changeably with the old devices or systems of the plaintiff, as a result of which it will contribute to the infringement of the claims of the Gullborg Patent in the same manner as it has heretofore contributed to the infringement of the same.

This finding partly grows out of the established trade conditions of the lubricating business, but principally because the defendant submits and offers the new devices upon the same basis as it used the old infringing devices. It is true that it shows a possibility of and a probable large demand for lubricating means and systems, both for automobile trade and in stationary machinery, such as mills, factories, laundries and bottling plants, but the defendant does not attempt to establish or show an intention to confine its business with the new devices or systems to such trade and as the devices are interchangeable and adapted for use with the plaintiff's devices and systems the conclusion is inescapable that the new devices will be made, sold and/or used with that intention.

[fol. 74] XI

With this finding of fact the finding of law is obvious. Judge Denison under similar circumstances in the case of

Lyman Mfg. Co. v. Bassick Mfg. Co., supra, has said that the case of Leedes & Catlin Co. v. Victor Co., 213 U. S. 301, 29 S. Ct. 495, 23 law ed. 805, was on all fours with the present one and I find the principle of law enunciated in that case to be controlling here—that the defendant submits new devices which do not meet structurally the claims of the Gullborg Patent when considered in and of themselves and apart from the devices or systems of the plaintiff, but seek to make, sell and/or use them ostensibly for its own system whereby there would be no infringement, but actually for use in connection with the patented devices or system of the plaintiff, whereby contributory infringement would result, and although the new devices submitted are either patented or unpatented the sale of them is beyond the rights of its maker and would constitute contributory infringement of the Gullborg Patent and the defendant may not make, sell and/or use such new devices submitted in this proceeding.

The same reasoning applied in the Lyman case, supra, bottom of page 38, as reported in 18 Fed. (2) 29, as in this and the facts are similar. By substitution of a few words the second paragraph of page 38 of that opinion will aptly apply to this case, and would read substantially as follows:

"When defendants put out their new devices nothing resembling them was upon the market excepting the plaintiffs', which had come into such general use, as above stated. It was natural that the 'pin fitting' should have been made of the same external size and thread as plaintiffs' because the grease cup tap holes had been standardized; but in other respects defendants' selection of precise form, size and shape of the pin fitting and bayonet-slot connection of the coupler could have no purpose, except to enable them to be joined with plaintiffs compressors and in fittings for the practice of the particular invention * * * This is contributory infringement."

And I so find the fact to be and the rule of law applicable to those facts pertaining on this record.

[fol. 75] XII

It is evident, too, that the combination of any one of the new devices submitted by defendant with the compressors, couplers and pin fittings of the plaintiff are readable on the

claims of the Gullborg Patent. This is true by reason of the generality of the various claims in all particulars, except as each claim selects one of the elements in particular and describes its structure and function in detail. This was demonstrated on the trial and it was this demonstration on the part of the plaintiff which the defendant so seriously resisted and objected to but it showed in a graphic way that the new devices of the defendant are interchangeable with the plaintiff's system, are adapted for the purposes and, as we have found, intended to be so used by the ultimate user. These claims have all been held valid by Judge Denison, and it has been further held that the question of infringement must be determined as of the moment when all the parts of the combination are brought into use—usually, as we have seen, by the individual car owner when greasing the car or by a service station or garageman when employed so to do.

Hence, I determined and hold that such evidence was entirely competent and material and find as a fact that the use of said new devices in cooperation with plaintiff's devices or system would constitute direct infringement and the manufacture, and/or sale of the same by the defendant would constitute a contributory infringement.

XIII

In order to make the attempt to clarify my holdings and findings, but at the risk of being guilty of suggesting a moot question or judging a matter not presented by the record and wholly extra judicial, it would appear that the defendant may not make, use and/or sell any devices interchangeable with the devices of the plaintiff as the facts are established on this record in regard to the existing conditions in the lubricating field and the purpose, intent and design with which defendant purposes to make, sell and/or use the new devices. This appears to be sound and conclusive of the rights of the parties in this cause based upon the facts developed in this record, and authority for it is clearly propounded by Judge Denison in Lyman v. Bassick, supra, page 37, paragraph 7. Defendant must manufacture its new devices in size and/or form different to those of the plaintiff, and sufficiently different in size and/or form so [fol. 76] as not to be adapted for use in plaintiff's system and to prevent interchangeability and direct infringement

by the ultimate user and to definitely repel and overthrow the inference, presumption and facts established on this record, that the new devices are intended to be used interchangeably in the plaintiff's patented system, which is contributory infringement.

If a reason for this rule of law is sought or deemed necessary to be stated, it may be found in the old principle that one must use its own property so as not to injure another, which, from olden times has been developed and enlarged and applied by the courts to unfair competition in trade between persons and corporations dealing wholly in unpatented products and also to trade between persons and corporations dealing in patented products. The defendant would then be in a position to establish and maintain a system of its own for use upon automobile bearings and b-arings on stationary machinery, etc., usually lubricated by the owner.

XIV

The above findings of fact and law appear to me to be conclusive of the issues submitted for my determination but it may not be amiss to observe, partly a repetition of a holding hereinbefore discussed, that the defendant in brief has broadened the order of reference by claiming and setting up a proposed new "system" of lubrication, made up of the several new devices by combining them into six combinations or "systems" which, of course, include the new "pin fittings," as a part thereof. The original pleading in the bill in this cause, charges, and the answer denies, contributory infringement in the manufacture, sale and/or use of certain devices as a part of the compressor or coupler and no issue was made as to a pin fitting. In fact the defendant answered that it had never sold pin fittings or a complete system, or any devices for purposes of a complete new installation. It appears in the record that the plaintiff is the owner of other patents covering the "pin fittings." Hence a decision in this cause concerning the "pin fittings" might not be conclusive of the rights found as other outstanding patents, not in issue, might affect and control the decision in this view. Were the matter presented as an original proposition I would be inclined to hold that any consideration of a new "pin fitting" device would be too remote from the issues joined by the parties in the origi-
[fol. 77] nal cause to be considered in a proceeding of this

nature and would confine it to a consideration of the compressor or coupler devices.

However, the greater includes the less and my findings include the "pin fitting" as a unit and as a component part of a "system" and it has been found that such use cannot be made.

XV

There is submitted in the brief of the plaintiff a series of suggested findings by me, which appear to have been answered hereinbefore, but at the risk of repetition and for the purpose of clearly setting forth findings that will meet all the issues raised, and so that the parties may have the benefit of them upon exceptions to this report, I shall briefly report my findings based thereon, but without the recitation of facts appearing in the record or citations of cases ruling the law.

(1)

I find as a matter of law that the District Court does not have jurisdiction to modify or construe an order or decree from which one of the parties has already perfected an appeal, that is obtained an order granting an appeal and filed its bond, or otherwise complied with the statutes or rules of court perfecting the appeal. A mere prayer for and grant of an appeal is not that perfection which transfers jurisdiction to an appellate court. This record showed at the hearing and now shows merely a prayer for and grant of an appeal. It was not perfected and the cause still remains in the trial court. And, too, the nature of the proceedings pending before me is such as not only do not seek to modify, amend, or reverse the order of preliminary injunction entered in the cause, but present the new devices under its terms and provisions, hence recognizing its validity, and I hold such a proceeding would have been valid and permissible even had the appeal been perfected, by filing bond and taking such other steps as required by law.

(2)

I find as a matter of fact that the new compressors and couplers submitted by the defendant are adapted for use in conjunction with the patented "pin fittings" of the plaintiff.

[fol. 78] (3)

I find as a matter of fact that the new pin fittings submitted by the defendant are adapted for use in conjunction with the patented compressors, referring to the patented couplers of the plaintiff.

(4)

I find as a matter of fact that it is established on this record that the manufacture, and/or sale of the new devices of the defendant would inevitably result in the use of the same in conjunction and combination with the devices of the plaintiff and in its system of lubrication.

(5)

I find as a matter of fact that the manufacture, and/or sale of the defendant's new devices would be made with the knowledge and intent of the use thereof, as found in findings No. 4, just preceding.

(6)

I find as a matter of law that such manufacture, sale and use of the defendant's new devices, as found in No. 4 and No. 5, preceding, would violate the preliminary injunction in force in this cause.

(7)

I find as a matter of law that such manufacture, sale, and/or use as found in No. 4 and No. 5, preceding, would be violative of the principle of law propounded by the United States Supreme Court in the case of Leeds & Catlin v. Victor, supra, as being contributory infringement of Gullborg's Patent 1,307,734, in view of the facts and law substantiated, in my opinion, by the opinion of Judge Denison in Larkin Mfg. Co. v. Bassick Mfg. Co., supra.

(8)

I find as a mixed question of law and fact that the consideration by me of the completely assembled "public system," as proposed by defendant, has broadened the scope of the order of reference, in view of the fact that the issues joined in the original cause do not cover an infringement of

a "pin fitting" and the issue raised in this proceeding is remote in that respect. But my findings make the question immaterial, although the question of "remote issue" is not [fol. 79] to be decided by a Master.

(9)

It is requested that I find that the defendant's attempt to raise the proposition of and submit a completely assembled "public system" of lubrication is merely "to propound the same subterfuge which the Supreme Court looked through as to disc records." (Lyman vs. Bassick, 6 C. C. A. 18 Fed. (2d) 29 at page 38.) This requested finding is neither a question of fact nor of law, but argument purely.

(10)

I find as a mixed question of law and fact that even if it should be conceded in the absence of pertinent pleading and proof that the completely assembled "public system" as proposed by the defendant should be held as falling outside the scope of the claim of Gullborg Patent 1,307,734, the manufacture, sale, and/or use of such "public system" and the component parts or elements should be enjoined in this suit under the principle of law announced by the Supreme Court in Leeds & Catlin v. Victor, supra, for the reasons hereinbefore pointed out. Conditions in the future may change and these new devices of defendant conceded to rest in the public domain and to contain no novel and patentable feature or principle, may be so made or constructed as not to infringe upon or violate the patented monopoly of the plaintiff and no doubt could then be used with an innocent intent, and not, as on this record, with the guilty knowledge and intent of unfairly encroaching upon the monopolistic patent rights of the plaintiff.

XVI

In conclusion, for the purpose of particularly responding to all questions of fact and law raised before me in this proceeding, I shall answer the insistance of defendant, so greatly relied on, that Judge Denison held that the defendants in that case were at liberty to use a screw-thread or gasket union because it was public property.

It will be particularly noted that the defendant on page 28, paragraph 4, of its brief filed before me, states that:

"In fact, the Court had before it just the type of 'compressors' (comprising 'gun,' hose and coupler) which [fol. 80] comprise defendant's newly submitted 'public system' of lubrication, as will be evident from the following language of the Court:

" '*A stationary packing, crowded against its support by an advancing screw head,* makes a tight joint, for the time, and while not disturbed, but when compressed or worn by long or frequent use, the screw must be further advanced, or the joint leaks, * * * It may be said, as usual in such cases, that *the defendants are at liberty to use a screw thread and gasket union.* One of the defendants tried to, but gave it up and adopted the secondary sliding element, giving the automatically adjustable intensive seal.' "

Yet the court denied the particular defendants in those causes the right to use that type of compressor upon two principal grounds, as I interpret the decision, first, not the right of "repair and replacement" but upon the alleged right to sell an unpatented article in spite of the infringing use of it which is to be made—an exception to the rule of contributory infringement, where such article was of a temporary and consumable character, second, upon the rule enunciated and established in Leeds & Catlin vs. Victor, supra.

The defendant on this record appears to be in the same situation as the defendants in those causes, at least I can find no fundamental or controlling difference, and hence cannot be permitted to make use of the screw-thread and gasket union principle, upon the facts proven and developed on this record, although it rests in the public domain of mechanical principles.

XVII

Since the preparation of the above part of this report, the defendant has submitted and filed a reply brief to which I have given careful consideration, and it is apparent that the defendant is earnestly and conscientiously insisting upon an alleged legal right to use non-infringing devices in the system of the plaintiff and feels that it is entitled so to do under established principles of patent

law. Recognizing this urgent insistenee and in order that no possible theory or proposition of law or fact that might affect the decision in this cause be overlooked, I have, as stated, given the reply brief careful study and shall take pains in answering each proposition therein contained and [fol. 81] it may possibly clarify any vagueness or uncertainty in my findings hereinbefore expressed.

1. In my opinion the bill of complaint does not merely charge contributory infringement but its averments are broad enough to prove both direct and contributory infringement of the Gullborg and Zerk Patents. The proof showed, however, contributory infringement.

3. It is insisted that the pleadings are broad enough to warrant proof of the issues on the petitions to use new devices. The bill is broad. Infringement of the Gullborg and Zerk Patents alone was charged. It may be that other patents exist that are not averred in the bill. Only Gullborg Patent 1,307,734 was introduced and insisted upon before me on the issues presented and both parties agreed that it was the only material patent.

If it should be insisted that the issues are too narrow to admit proof of defendant's "pin fittings," which the plaintiff has done before me, it is important to state that a full hearing was had and a broad latitude given both parties to present all the proof and argument deemed necessary. The plaintiff did not request further time for additional evidence and was accorded every opportunity to fully develop its proof and to meet the proof offered by the defendant. Hence this record shows no lack of opportunity on the part of the plaintiff to meet the issues submitted by the defendant and no request of any character for further or additional time. These facts would tend in a measure to cure the bill of "remote" issue raised by the plaintiff, unless there should be other outstanding valid patents that have not been pleaded in this cause.

6. Counsel for both parties have taken issue as to the character of "coupler" referred to by Judge Denison in his opinion. I have read the parts of the record of that case pointed out to me by both counsel, and as best I can interpret the testimony the coupler referred to was of the "screw-thread and gasket union" type, identical, or at

least similar to the type of coupler introduced before me. And I may add that I have so considered it throughout the entire hearing and this report. I do not think that counsel for plaintiff is justified on the record of that case, so far as pointed out to me by counsel and examined in seeking to differentiate the coupler device introduced before me. Of course the coupler is not physically exhibited, nor have counsel pointed out an illustration of it, but I hold that the reference of Judge Denison was to a coupler device at least similar in principle to that exhibited herein.

[fol. 82] XVIII

1. I cannot agree with counsel for defendant that Judge Denison's opinion appears to be clear that the public may connect to the Gullborg grease cups or pin fittings any compressor which does not respond to the Winkley and Gullborg claims, as, for instance, a compressor having a screw-thread and gasket union coupler. Reasons for my interpretation will hereafter appear.

2. I cannot agree with counsel for defendant that Judge Denison's opinion appears to be clear that the public may make grease cups or fittings of the "common bayonet pin" type, to which Gullborg's "coupler" may be connected, providing the pin of said grease cups are "mere arms projecting from each side and the spring abutment is otherwise furnished." Reasons for my interpretation will hereafter appear.

XIX

Under paragraph X page 25 of this report, I found as a fact that the new devices or a system comprising them are designed, intended and adapted for use interchangeably with the devices or system of the plaintiff.

This finding in regard to intended use was reached by me not on direct evidence but by inference from established facts, which in my opinion conclusively proved the finding. On pages 8 and 9 of the defendant's reply brief filed before me the following admissions of record are made:

"As stated in the Answer as well as the defense affidavit, and as acknowledged by plaintiff in its brief on page 29, defendant did at no time make, sell or distribute 'fittings.' Neither is it the present intention of defendant to make,

sell or distribute any 'fittings' or grease cup in the future, of the non-infringing type authorized by Judge Denison and *illustrated* by the 'fittings' submitted by defendant as Exhibits 'C' and 'G'.

"As stated by defendant originally, and as acknowledged by plaintiff in its brief, on page 29, defendant's sole interest lies in a non-infringing 'compressor' clearly authorized by Judge Denison, which does 'not respond to the Winkley and Gullborg claims, but which can be used with plaintiff's fittings', the latter (fittings) having been sold to the public outright by plaintiff, under its Gullborg patent No. 1,307,733."

[fol. 83] Thus the finding of fact referred to is expressly admitted of record and it is established that the new devices are to be made and used with the knowledge and intent of interchangeable use in and with the system of the plaintiff. This fact is the controlling one in this litigation and it is my opinion that the defendant would violate the patent rights of the plaintiff under such established facts. It seems to me that this rule of law is set forth in Judge Denison's opinion and I pointed it out on page 36 of this report. It is: That one may use or sell an un-patented article in spite of the infringing use of it which is to be made where such article is of temporary and consumable character, such as a paper roll, but not where it is of a permanent character and designed to last the life of the patented article. Such is the character of the compressors and fittings of the Gullborg patent, as held by Judge Denison, not in direct terms but by plain and inescapable inference. I cannot read the opinion in the light of the decree rendered and accord to it any other meaning. Then, too, the rule of law enunciated in Leeds & Catlin Co. v. Victor, supra, which has hereinbefore been discussed and likewise held, in my opinion, by Judge Denison, would prevent the use by defendant of the new devices under the facts established in this proceeding and the above quoted solemn admission made of record.

Defendant

Complainant should not overlook the fact that Judge Denison has held to be valid claims 14 and 15 of the Gullborg Patent. It is beyond my power, as well as that of the District Court, to limit the effect of that decision under

facts almost identical and at least similar to those established herein, but the question must be presented to the appellate court for a further construction, interpretation and limitation of the scope of claims 14 and 15, if valid reason therefor appear. I am ready to agree that so construed a very broad, in fact much too broad, scope is given in my opinion, to claims 14 and 15. It virtually gives an exclusive monopoly to a mere patented device and it excludes all use for the same purpose of another device, whether patented or unpatented. To use the new patented or unpatented device interchangeability as to form and dimension must be lacking, virtually requiring a complete system on the part of a competitor that cannot be interchangeably used. The solution of this problem under the facts and decisions as now existing rests, in my opinion, with the appellate courts, certain it is, a lower court cannot limit [fol. 84] the scope of claims 14 and 15 under the authority controlling the courts of this circuit, if the decision be clearly understood and interpreted.

I am further ready to agree with the concluding paragraph of the reply brief that it is no infringement to furnish a "compressor" minus a "coupler," in other words, the pump and hose elements adapted to receive a Gullborg alemite coupler of plaintiff's manufacture. These two devices are public property; but that question is not presented on this record and the argument and my finding are entirely gratuitous. But, again, it is not permissible to furnish the pump and hose element adapted to receive a non-infringing coupler, if it is furnished with the knowledge and intent that it will be used in the patented system of the plaintiff. This follows as a consequence of the principles of law hereinbefore stated and discussed.

I find, therefore, and respectfully report, that in my opinion, the petition and supplemental petition should be dismissed and the right denied defendant to use the new devices submitted thereunder.

The testimony adduced before me on this reference was reported and I submit with this report the testimony, adduced, and the exhibits thereto, all properly identified.

All of which is respectfully submitted.

Albert G. Riley, Standing Master.

October 15, 1927.

[fol. 85] IN UNITED STATES DISTRICT COURT

PLAINTIFF'S EXCEPTIONS TO THE REPORT FILED OCTOBER 15, 1927, OF THE STANDING MASTER ON ORDER OF REFERENCE OF APRIL 20, 1927—Filed Nov. 3, 1927

And now comes The Bassick Manufacturing Company, plaintiff and excepts to the report of Albert G. Riley, the standing master, filed in this cause on the 15th day of October, A. D. 1927, and for cause of exception shows:

(1) That the master has in his said report stated on page 12 that,

"This device (the Exhibit F coupler submitted by the defendant) is identical in structural characteristics with the other two couplers submitted and should be classed as a 'solid gasket' and 'screw-thread union'."

The phrases thus quoted by the master are taken from the opinion of the Sixth Circuit Court of Appeals in Lyman v. Bassick and the allied cases referred to in the master's report. The "solid gasket" and "screw-thread union" referred to in the said opinion of the Sixth Circuit Court of Appeals was exemplified by plaintiff's Exhibits No. 107, No. 112 and No. 126 in the case of The Bassick Manufacturing Company v. The O. K. Manufacturing Company and was and is of a class having quite different structural characteristics than the Exhibit F or other couplers submitted by the defendant herein. The "screw-thread" and "gasket union" to which the opinion of the Sixth Circuit Court of Appeals referred saying that "one of the defendants tried to (use it) but gave it up, and adopted the secondary sliding elements giving the automatically adjustable intensive seal" was, as shown by the aforesaid Exhibits, of a kind in which the fitting was externally screw threaded and in which the coupler was interiorly screw threaded so that the coupler was attached to the fitting by screwing the female threads of the fitting by screwing the female threads of the coupler over the male threads of the fitting. It was this construction which the opinion of the Court of Appeals referred to as "a screw-thread and gasket union" and which one of the defendants tried to use but gave it up and adopted the secondary slid-

ing element which gives the automatically adjustable intensive seal.

The same error underlies and is incorporated in the following statement appearing on page 39 of the master's report:

[fol. 86] "The coupler referred to was of the 'screw-thread and gasket union' type, identical, or at least similar to the type of coupler introduced before me. And I may add that I have so considered it throughout the entire hearing and this report. I do not think that counsel for plaintiff is justified on the record of that case, so far as pointed out to me by counsel and examined, in seeking to differentiate the coupler devices introduced before me. Of course, the coupler is not physically exhibited, nor have counsel pointed out an illustration of it, but I hold that the reference of Judge Denison was to a coupler device at least similar in principle to that exhibited herein."

(2) That the master on page 14 of his report states:

"In the opinion of Judge Denison the patentable novelty of Gullborg's patent form of pin fitting was held to be that the pin which furnished bearings for the slot was made to pass through the fitting and furnish an abutment for the valve closing spring; that is only that complete combination that can be patentable,"

whereas, the statement of the opinion of the Sixth Circuit Court of Appeals was:

"We see no reason for denying the patentable novelty of Gullborg's particular form fitting, by reason of which it has come to be called a pin fitting, and by which the same pin which furnished bearings for the slot was made to pass through the fitting and furnish an abutment for the valve closing spring; but it is only this complete combination that can be patentable; when the pin becomes mere arms projecting from each side, and the spring abutment is otherwise furnished, we have only the already common bayonet joint member."

(3) That on page 14 of his report the master states relative to defendant's Exhibit C fitting and to the fitting of the Gullborg patent in suit, that:

"The functions performed by the two are identical and they are equivalent. In view of the fact, however, that the Gullborg patent has been limited to the use of the transverse pin as the spring abutment, I find, as a matter of fact, [fol. 87] that defendant's Exhibit C is not an infringement of the Gullborg patent,"

whereas, the Gullborg patent was not and has not been limited to the use of the transverse pin as the spring abutment. Furthermore, the defendant's Exhibit C fitting is, as stated in the above quoted portion of the master's report, an equivalent and performs identical functions. It is, therefore, an infringement at least in the sense employed by the master in stating his conclusion that "defendant's Exhibit 'C' is not an infringement of the Gullborg patent."

(4) That on page 42 of his report the master states,

"I am ready to agree that so construed a very broad, in fact much too broad, scope is given, in my opinion, to claims 14 and 15,"

whereas, the construction referred to as required by the rule of law enunciated by the United States Supreme Court in Leeds & Catlin v. Victor, 213 U. S. 301, and by the Sixth Circuit Court of Appeals in Lyman v. Bassick, 18 Fed. (2) 29, does not give too broad a scope to claims 14 and 15 of Gullborg Patent 1,307,734.

Williams, Bradbury, McCaleb & Hinkle, Lynn A. Williams, Solicitors and Counsel for the Plaintiff, The Bassick Manufacturing Company.

IN UNITED STATES DISTRICT COURT

DEFENDANT'S EXCEPTIONS TO THE MASTER'S REPORT FILED OCTOBER 15, 1927—Filed Nov. 5, 1927

Now comes defendant by its counsel and excepts to the Master's report as to certain items specified, infra,

[fol. 88] 1. For that the Master after holding:

(A) That defendant's newly submitted coupler devices "A", "B" and "F" are not infringements of the claims of the Gullborg patent in suit,

"Thus, I find as a matter of fact, that this device Exhibit "A" is not an infringement of the claims of the Gullborg patent." (P. 8, Master's report.)

"Thus, I find as a matter of fact, that defendant's Exhibit "B" is not an infringement of the Gullborg patent." (P. 10 Master's Report.)

"Thus, I find as a matter of fact that defendant's Exhibit "F" is not an infringement of the Gullborg patent." (P. 12 Master's Report.)

And

(B) That each of the couplers "A", "B" and "F" submitted by the defendant exemplify the "screw thread and gasket union" referred to by Judge Denison, in his opinion, and as to which Judge Denison held that the defendants were at liberty to use this type of coupler:

"Thus, there is a clear field of difference in the two devices" (Defendant's newly submitted Coupler "B" on one hand and plaintiff's Gullborg coupler, on the other hand). "It is argued by counsel that it should be characterized as a solid gasket and "screw thread union," with permitted use as held by Judge Denison. The differences are marked and I can see no element of novelty or invention common to both." (P. 10 Master's Report.)

"This device (coupler "F") is identical in structural characteristics with the other two couplers submitted (Couplers "A" and "B") and should be classed as a "solid gasket" and "screw-thread union." (P. 12 Master's Report.)

* * * "as to the character of "coupler" referred to by Judge Denison in his opinion * * * as best I can interpret the testimony the coupler referred to was of the "screw thread and gasket union" type identical, or at least similar to the type of coupler introduced before me. And I may add that I have so considered it throughout the entire hearing and this report. * * * I hold that the reference of Judge Denison was to a coupler device at least similar in principle to that exhibited herein."

[fol. 89] then found or assumed that the manufacture, use or sale of the foregoing non-infringing structures would constitute contributory infringement of said Gullborg patent.

2. For that the Master after holding that defendant's newly submitted "fitting devices or grease cups "C" and "G" are not infringements of the Gullborg patent:

"* * * I find, as a matter of fact that defendant's Exhibit "C" is not an infringement of the Gullborg patent." (P. 14 Master's Report.)

"* * * I find, therefore, as a matter of fact, that defendant's Exhibit "G" is not an infringement of any of the claims of the Gullborg patent." (P. 16 Master's report.)

then found or assumed that the manufacture, sale or use of said "fittings" or "grease cups" "C and G" would constitute contributory infringement of said Gullborg patent.

3. For that the Master after holding that the manufacture or sale by defendant of a pump and hose adapted to receive a Gullborg coupler of plaintiff's manufacture would not constitute an infringement:

"I am further ready to agree with the concluding paragraph of the reply brief that it is no infringement to furnish a "compressor" minus a "coupler," in other words, the pump and hose elements adapted to receive a Gullborg alemite coupler of plaintiff's manufacture."

then assumed that the question was not presented by the record, the Master saying:

"These two devices are public property; but that question is not presented on this record and the argument and my finding are entirely gratuitous."

Defendant here respectfully points out that the last and third question was raised, presented and submitted in both defendant's briefs, and the record furnishes abundant warrant for affirmatively determining this latter item, No. 3.

Wherefore defendant respectfuly prays,

(a) That the foregoing exceptions be ruled on favorably to defendant, and

[fol. 90] (b) That the Master's recommendation as to defendants right to furnish a pump and hose adapted to re-

ceive a Gullborg Alemite coupler of plaintiff's manufacture, be adopted and ordered approved.

Respectfully submitted, E. Hayward Fairbanks, Leonard L. Kalish, Burch, Minor & McKay, Counsel for Defendant.

IN UNITED STATES DISTRICT COURT

AMENDMENT TO ANSWER—Filed April 20, 1928

Now comes defendant and by leave of Court obtained, amends its answer heretofore filed, in the following particulars, to-wit:

After paragraph 23 of the answer insert the following additional paragraphs:

(24) Defendant further answering avers, as a separate and distinct defense, that the matters and things complained of herein are now res judicata by reason of the final decree entered by his Honor, Joseph L. Bodine, on February 28th, 1928, in a case entitled in the United States District Court, District of New Jersey, Bassick Manufacturing Co. vs. The Frank Miller Co. (Equity No. 2759).

(a) Wherein, as shown by the Bill of Complaint, which is a substantial duplicate of the Bill of Complaint herein, the cause of action is identical with the cause of action herein, to wit: the Gullborg Patent No. 1,307,734 and the Zerk Patent No. 1,475,980;

(b) Wherein, as shown by the record, particularly the affidavits of J. E. Otis, Jr., and Elwood Hansmann on behalf of plaintiff, the issues of infringement involved are the same as the issues of infringement herein;

(c) Wherein, the plaintiff has shown by its record, partic- [fol. 91] ularly the affidavit of J. E. Otis, Jr., filed on behalf of plaintiff, that the plaintiff is identically the same as the plaintiff herein and that the defendant, The Frank Miller Co., is in privity with the defendant herein;

(d) Wherein the quality of the parties litigant is identical with the quality of the parties litigant herein; and

(e) Wherein the pleadings and proofs are the same as the pleadings and proofs herein.

(25) Defendant further answering avers that in the above identified cause of Bassick Co. vs. Frank Miller Co., Judge Bodine expressly denied plaintiff a decree of dismissal qualified by the term "without prejudice" and ordered said words "without prejudice" stricken from the decree, so that said decree of dismissal in said Frank Miller suit as finally entered by the District Court of New Jersey reads as follows:

"This cause having come on to be heard before the Court upon plaintiff's motion to dismiss, the same having been argued by counsel, and the Court being fully advised in the premises, it is

Ordered, that the above entitled cause be dismissed [without prejudice]*, with the taxable costs to the defendant to be taxed by the Clerk."

That the above entitled cause be discissed,

(Sgd.) Joseph L. Bodine, United States District Judge.

and said decree of dismissal is a final decree on the merits and conclusive as to all matters specifically disposed of thereby and also of all other matters which might have been disposed of in said suit as plaintiff's option. Said decree was entered on final hearing on bill, answer and the completed proof of said plaintiff and said defendant, and after the submission of said cause for decision. A copy of the bill, answer, final decree and other pertinent portions of said record in said New Jersey cause are filed herewith as Exhibit A.

And wherefore defendant prays for the entry of a similar decree of dismissal herein.

Burch, Minor & McKay, Solicitors for Defendant.
Leonard L. Kalish, E. Hayward Fairbanks, of Counsel for Defendant.

[fol. 92] Plaintiff's counsel consents that the foregoing amendment to the Answer may be entered with the same force and effect as if approved by the Court.

—— ——, Counsel for Plaintiff.

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*[Words enclosed in brackets erased in copy.]

EXHIBIT "A" TO AMENDMENT TO ANSWER

UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

BILL OF COMPLAINT—Filed Apr. 26, 1928.

Plaintiff, for complaint against defendant, alleges as follows:

(1) Plaintiff, The Bassick Manufacturing Company, is a corporation organized and existing under and by virtue of the laws of the State of Delaware, a citizen of Delaware, a resident of, and having its principal place of business at Chicago, in the County of Cook, and State of Illinois.

(2) Defendant, The Frank Miller Company, is a corporation organized and existing under and by virtue of the laws of the State of New Jersey, a citizen of New Jersey, a resident of and having its principal place of business at Camden, Camden County, New Jersey, within the District of New Jersey, within which District it has committed acts of infringement of plaintiff's patents, of which complainant is made herein.

(3) Arthur V. Gullborg, a citizen of the United States, [fol. 93] being prior to December 21, 1918, the original, first, and sole inventor of certain new and useful improvements in Lubricating Means, filed and prosecuted lawfully, an application for United States Patent therefor, and, having complied in all due respects with the Statutes and the rules of the Patent Office, United States Patent No. 1,307,734 was granted lawfully and issued pursuant to said application on June 24, 1919.

(4) Oscar Zerk, a citizen of the United States, being, prior to November 21, 1922, the original, first and sole inventor of certain new and useful improvements in Lubricating Apparatus, filed and prosecuted lawfully, an application for United States Patent therefor, and, having com-

plied in all respects with the Statutes and rules of the Patent Office, United States Patent No. 1,475,980 was granted lawfully and issued pursuant to said application on December 4, 1923.

(5) Said inventions of Arthur V. Gullborg and Oscar Zerk, were new, useful, not known or used by others in this country before their respective inventions, not patented or described in any printed publications anywhere before their respective inventions, or more than two years prior to their respective applications, not in public use prior to their respective applications, not patented in any foreign country by them or their legal representatives on applications filed more than one year before their said applications in this country, and not abandoned. Said patents are now in full force and are hereby proffered and ready to be produced before the Court.

(6) Prior to the commencement of this suit, plaintiff became, by lawful assignments duly recorded in the United States Patent Office, and now is the sole owner of said United States patents Nos. 1,307,734 and 1,475,980, and of all rights thereunder and of all rights of action for infringement thereof.

(7) The inventions patented by said patents Nos. 1,307,734 and 1,475,980 are of great utility and are of great value to plaintiff, and of great benefit to the public. Plaintiff and its predecessors have sold very extensively and introduced into public use, devices in which said patented inventions are embodied, and the public and manufacturers have demanded and purchased from plaintiff and its predecessors, such devices embodying said inventions, in very large and in very rapidly increasing quantities.

(8) Plaintiff and its predecessors have marked all devices embodying said inventions made or sold by them, in full compliance with the United States Statutes.

[fol. 94] (9) The public has, in general, acknowledged the validity of the aforesaid patents Nos. 1,307,734 and 1,475,980 and has respected plaintiff's rights therein and thereunder.

(10) Heretofore, to wit: on September 17, 1925, The Bassick Manufacturing Company brought a suit against Mont-

gomery Ward & Co., Inc., in the United States District Court at Chicago, Illinois, and thereafter The Larkin Automotive Parts Company of Dayton, Ohio, intervened in said suit and became a party defendant therein. The said suit came on for final hearing before his Honor, Judge Walter C. Lindley, upon Gullborg patents Nos. 1,307,733 and 1,307,734 and Zerk patent No. 1,475,980; and the court, after hearing the evidence offered in behalf of both sides and upon briefs, rendered an opinion and entered a decree sustaining the said patents and finding them infringed. An appeal was taken by the defendants and argued in due course before the United States Circuit Court of Appeals for the Seventh Circuit, which rendered an opinion and entered decrees pursuant thereto, affirming the decree of the District Court. A copy of the said opinion and decree of the said Court of Appeals and the decree reviewed thereby is attached hereto and made a part hereof.

(11) The validity of the said Gullborg patent No. 1,307,734, was sustained and the patent found infringed by the United States Circuit Court of Appeals for the Sixth Circuit in certain appeals which were pending before, and decided by it. The said Court of Appeals rendered an opinion and entered decrees on March 18, 1927, as will more fully and at large appear from the copies thereof in the booklet submitted herewith and forming a part hereof, which includes the orders and decrees of the District Courts from which the said appeals were taken.

(12) United States District Courts in contested cases have adjudicated said Gullborg patent No. 1,307,734, upon final hearing or plaintiff's motion for a preliminary injunction in the following cases involving equipment similar to that sold by the defendant herein, and in numerous other cases decrees have been entered by consent, the defendants having satisfied plaintiff's claims for profits and damages.

[fol. 95]

Defendant	Location
Auto Equipment Company	Indianapolis, Ind.
Automotive Specialty Co.	New York
Ballou & Wright	Portland, Ore.
Champion Hy-Pressure Mfg. Co., Inc	New York.
Chanslor & Lyon Co.	San Francisco.

Defendant	Location
Cohen, John M. et al.	Boston, Mass.
Faught, A. E. et al.	Ft. Worth, Tex.
Gaines Motor Sales Co.	Wichita Falls, Tex.
Gibson Co., The	Indianapolis, Ind.
Gross, Ph. Hdw. Supply Co.	Milwaukee, Wis.
Hollingshead, R. M. & Co.	Memphis, Tenn.
Horst & Wilkinson	Davenport, Iowa.
Justus & Parker Co.	Columbus, Ohio.
Lowe Motor Supplies	New York.
Mills-Morris Co.	Memphis, Tenn.
Nichols, Dean & Gregg	St. Paul, Minn.
Orgill Bros. & Co., Inc.	Memphis, Tenn.
Post & Lester Co.	Hartford, Conn.
Pruden, W. E. Edw. Co	New York
Scott, John P.	Washington, D. C.
Stage Bros.	Lincoln, Neb.
Straus-Frank Co.	San Antonio, Tex.
Staff Bros. Co.	New York
Standard Products Co.	Wilmington, Del.
Taubman Automotive Co.	Baltimore, Md.

(13) Defendant, in violation of plaintiff's rights under said patents Nos. 1,307,734 and 1,475,980, and without any authority since the issuance of said patents, and within six years before the commencement of this suit within the District aforesaid, and elsewhere in the United States, has threatened to infringe and has infringed said patents Nos. 1,307,734 and 1,475,980, by making and/or using and/ or selling Lubricating Apparatus embodying said patented inventions and by making and/or using and/or vending devices designed and intended for use in apparatus embodying said patented inventions. Defendant threatens to continue to commit acts in violation of plaintiff's rights and in infringement of said patents, whereby plaintiff has been and will be greatly and irreparably damaged, and whereby defendant is about to obtain large profits which in equity will belong to plaintiff, the amount of which damages and profits plaintiff cannot ascertain except by an accounting.

Plaintiff therefore prays:

[fol. 96] (a) That defendant be required to answer this Bill of Complaint, but not under oath, answer under oath being hereby expressly waived.

(b) That the Court grant a temporary restraining order, a preliminary injunction pending this suit, and a perpetual injunction restraining the defendant, its agents, employees, associates and confederates, enjoining them from making and/or using and/or vending the combinations patented in said patents or any of the parts thereof, or any other devices embodying the inventions described and claimed in any of said patents or adapted to be used in systems or combinations embodying the same, either for original equipment or for replacement under the guise of "repairs" or otherwise, and from offering or advertising so to do, and from aiding or abetting or in any way contributing to the infringement of said patents or either of them.

(c) That this cause be referred to a Master to make and report an account of damages and profits, accruing from defendant's infringement of said patent, and that plaintiff have judgment for the damages and profits so found and for the costs of this suit.

(d) That plaintiff have such other and further relief as equity may require.

The Bassick Manufacturing Company, by (Sgd.) J. E. Otis, Jr., Vice-President. French Richards & Bradley, Samuel H. Richards, Solicitors of Complainant. Lynn A. Williams, Williams, Bradbury, McCaleb & Hinkle.

STATE OF ILLINOIS,
County of Cook, ss:

On July 1st, 1927, at Chicago, Illinois, before me personally appeared J. E. Otis, Jr., who, being first duly sworn testified that he is a Vice-President of The Bassick Manufacturing Company the plaintiff named in the foregoing Bill of Complaint; that he signed the same as such officer; that he has read the Bill of Complaint; that he has knowledge of the facts therein set forth, and that the allegations therein are true.

(Sgd.) Hattie R. Schooler, Notary Public. (Seal.)

[fol. 97] I hereby certify that the foregoing is a true copy of the original on file in my office.

George T. Cranmer, Clerk, per L. M. Zarp, Deputy.

UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

ANSWER—Filed July 26, 1927

To the Honorable Judges of the above entitled Court:

The answer of the above entitled defendant to the Bill of Complaint exhibited against it by the above named plaintiff.

1. Defendant has no information as to whether or not plaintiff is incorporated, organized and existing under and by virtue of the laws of the State of Delaware, whether it is a citizen of Delaware, whether it has its principal place of business at Chicago, and whether it is a resident of Chicago, County of Cook, in the State of Illinois, and therefore denies the same and leaves plaintiff to make full proof thereof.

2. Defendant admits the averments of its existence and organization under the laws of the State of New Jersey, [fol. 98] and as to its having a regular and established place of business at Camden, in the County of Camden, State of New Jersey.

3. Defendant denies having committed any act of infringement complained of either within the District of New Jersey, or elsewhere.

4. Defendant denies that Arthur V. Gullborg is a citizen of the United States, and denies that said Gullberg, prior to December 21st, 1918, was the original, first and sole inventor of certain alleged new and useful improvements in Lubricating Means; denies that at the date of filing said application, said Arthur V. Gullborg was a citizen of the United States, and defendant denies that said Gullborg

lawfully filed and prosecuted an application for United States Letters Patent therefor, and that the statutes and rules of the Patent Office were complied with in the filing and prosecution of said application and issuance of Letters Patent thereon, and therefore denies that Letters Patent No. 1,307,734 was lawfully granted and issued on June 24th, 1919, pursuant said application.

5. Defendant denies that Oscar Zerk is a citizen of the United States, and denies that said Zerk prior to November 21st, 1922, was the original, first and sole inventor of certain new and useful improvements in Lubricating Apparatus, and denies that he lawfully filed and prosecuted an aplication for United States patent therefor, and denies that he complied in all respects with the statutes and the rules of the Patent Office, and denies that patent No. 1,475,980 was lawfully granted and issued on December 4th, 1923, pursuant to said application.

6. Defendant denies each and every allegation in the fifth paragraph of the Bill, and particularly denies that said alleged inventions or any part thereof, were in fact inventions, that the subject-matter thereof was new or useful or not known or used in this country before the alleged inventions thereof by said Arthur V. Gullborg and Oscar Zerk, denies that the same were not patented or described in any printed publication anywhere before their alleged invention thereof, or more than two years prior to their said applications, denies that the same were not in public use or on sale in this country for more than two years prior to said applications, or not patented in any country by them or their legal representatives on applications filed more than one year before their said applications in this country, and not abandoned, and therefore denies that said patents are now in full force.

[fol. 99] 7. Defendant is not advised as to whether or not plaintiff is now the sole owner of said United States Letters Patent here in suit, and of all rights therein and all rights of action for infringement thereof, as alleged, and therefore denies the same and leaves plaintiff to make full proof thereof.

8. Defendant denies each and every allegation contained in the seventh paragraph of the Bill, and particularly denies that the alleged inventions patented by said Letters Patent

in suit, are of great utility and of great value to the plaintiff and of great benefit to the public; denies that plaintiff and its predecessors have extensively sold and introduced into public use devices embodying the same, and denies that there has been a very large and rapidly increasing demand therefor.

9. Defendant denies that plaintiff and its predecessors have marked all devices embodying said alleged inventions in full compliance with the statutes of the United States, as alleged in the ninth paragraph of the Bill, and defendant further avers ad that it received no notice of the existence of the patents here in suit prior to the filing of the Bill.

10. Defendant denies each and every allegation in paragraph nine of the bill, and particularly denies that the public has generally acknowledged the validity of the said Letters Patent, or respected or recognized any rights of plaintiff therein and thereunder, and avers the contrary to be true and that said Letters Patent have been generally regarded as invalid and inoperative and without legal effect.

11. Defendant admits the allegations of paragraph ten of the Bill but avers that the facts alleged therein are irrelevant to the issues herein, and said allegations are misleading because they are incomplete in vital particulars, and different equities and issues of infringement were involved in said case of the Larkin Co.

12. Defendant admits that certain of the claims of the Gullborg patent No. 1,307,734, were sustained, with certain specific limitations and restrictions as to their scope, by the Circuit Court of Appeals for the Sixth Circuit in certain appeals which were pending before it, and that said Court of Appeals rendered an opinion. Defendant denies, however, that said Gullborg patent was either sustained in toto as apparently alleged by plaintiff in paragraph eleven of the Bill, or sustained broadly as apparently contended by plaintiff, and defendant avers on the contrary that some and particularly a certain one of the claims in issue of said Gullborg [fol. 100] patent were declared invalid by said Court of Appeals for the Sixth Circuit, and that the scope of the sustained claims was greatly narrowed and restricted by said Court.

13. Defendant denies that the validity or scope of the Gullborg patent No. 1,307,734, was adjudicated upon a full

and complete defense record by the U. S. District Courts in the cases cited in paragraph twelve of the Bill, as apparently alleged by plaintiff in said paragraph; denies that said cases cited were contested or fully defended upon a full and complete record, and denies that said cases involved equipment similar to anything sold by defendant, or the same issue of infringement as here:

14. Defendant denies each and every allegation of the thirteenth paragraph of the Bill and particularly denies that it has violated any right secured to plaintiff under said Letters Patent in suit, at any time or at any place, and denies having infringed said Letters Patent, denies any intention or threats of violation of any right of plaintiff under said Letters Patent, denies that plaintiff has been or will be damaged as alleged, and denies that defendant is about to obtain any profits accruing in equity to the plaintiff.

15. As an additional and separate defense in its behalf, defendant alleges that Arthur V. Gullborg and Oscar Zerk, were not the original, first and sole investors of the subject matter disclosed and claimed in said Letters Patent, but that they surreptitiously or unjustly obtained said Letters Patent, for that which was in fact invented by others, who were using reasonable diligence in adapting and perfecting the same, wherefore, said Letters Patent are void and are of no legal effect.

16. Defendant further avers that the subject matter disclosed and claimed in said Letters Patent to Gullborg, No. 1,307,734, or all material and substantial parts thereof, had been patented or described in printed publications long prior to the supposed invention or discovery by the said Arthur V. Gullborg, or for more than two years prior to his application for Letters Patent therefor, particularly in the specifications, drawings and claims of the following Letters Patent, and that therefore, said Letters Patent sued upon are null and void:

No.	8,251,	To	Richardson, July 29, 1851;
"	182,675,	"	Johnson, Sept. 26, 1876;
"	242,141,	"	Laskey, May 31, 1881;
"	242,564,	"	Sholder, June 7, 1881;
"	249,194,	"	Marks et al., Nov. 8, 1881;
"	456,295,	"	Stedman, July 21, 1891;

[fol. 101]

No. 610,359, To Lees, Sept. 6, 1898;
" 905,717, " Lang, Dec. 1, 1908;
" 919,743, " Mason, Apr. 27, 1909;
" 927,337, " Dupre, July 6, 1909;
" 937,682, " MacClyment, Oct. 19, 1909;
" 983,095, " Townsend, Jan. 31, 1911;
" 988,422, " Wilson, Apr. 4, 1911;
" 1,027,588, " Brown, May 28, 1912;
" 1,051,805, " Danberg, Jan. 28, 1913;
" 1,117,762, " Barcus, Nov. 17, 1914;
" 1,141,101, " Brown, June 1, 1915;
" 1,150,420, " Davis, Aug. 17, 1915;

Reissue

" 14,667, " Winkley, June 10, 1919.

British Patents

Thompson, No. 21,927, Apr. 24, 1897;
Hellman, " 15,757, Aug. 1, 1905;
Grey, " 18,727, of 1912;
Sharpe, " 26,134, Nov. 14, 1912;
Henshall, " 9,111, Apr. 9, 1914;
Alley, " 21,893, of 1906;
Seng, " 3,028, Feb. 24, 1915.

French Patents

Chandeur, No. 421,556, Feb. 25, 1911;
Seng, " 468,869, of 1914;
" Addition 20,083, of 1916.

17. Defendant further avers that the subject matter disclosed and claimed in said Letters Patent to Oscar Zerk, No. 1,475,980, or all material and substantial parts thereof, had been patented or described in printed publications long prior to the supposed invention or discovery by the said Oscar Zerk, or for more than two years prior to his application for Letters Patent therefor, particularly in the specifications, drawings and claims of the following Letters Patent, and that therefore, said Letters Patent sued upon are null and void:

No. 1,494,652, Wallace, May 20, 1924;
" 1,459,662, Manzel, June 19, 1923;
" 1,416,668, Abbott, May 23, 1904.
British patent to Clarkson No. 6,940 of 1904 White Motors Co. Cleveland, Ohio.

18. And as an additional and separate defense in its behalf, defendant alleges that said Arthur V. Gullborg [fol. 102] was not the original and first inventor or discoverer of any material and substantial parts of the things patented in said Letters Patent, but that the same, and all material and substantial parts thereof, were previously devised by the several applicants for the Letters patent identified in the next preceding paragraph herein, wherefore said letters patent are void and of no legal effect.

19. And as an additional and separate defense in its behalf, defendant alleges that the things patented in and by said Letters Patent were in public use and on sale in this country for more than two years before the application of Arthur V. Gullborg and Oscar Zerk, therefor, as prior to their alleged inventions thereof by the following named persons at the places indicated, to-wit:

Wilson Instrument and Specialty Company, Passaic, N. J.
Clarence Wilson, 21 W. 9th Street, N. Y., N. Y.
Albert K. Bush, 382 Paulison Ave. at Passaic, N. J.
William P. Welsh, 134 Center Street, Nutley, N. J.
Chester C. Henry, Summit, N. J.
O. K. Specialty Co., Newark, N. J.
John Swenson, 17 Madison Ave., Clifton, N. J.
Auto Car Co., Ardmore, Penna.
White Motor Co., Cleveland, Ohio.

wherefore, said Letters Patent are void and of no legal effect.

20. And as an additional and separate defense in its behalf, defendant alleges that the things patented in and by said Letters Patent, did not, at the date of said Letters Patent, constitute an invention patentable under the law, but were obvious aggregations of old and well known mechanical devices and expedients arranged for operation in an obvious and customary manner, and devoid of invention whereby Letters Patent are invalid and without legal effect.

21. And as an additional and separate defense in its behalf, defendant alleges, that alleged invention forming the subject matter of certain of the claims of the Gullborg patent No. 1,307,734, also forms the subject matter of certain of the claims of patent No. 1,307,733 granted to said Arthur V.

Gullborg, on June 24, 1919 and said certain claims of patent No. 1,307,734 are invalid and of no legal force and effect on the ground of double patenting.

22. Defendant further avers on information and belief [fol. 103] that the inventions of said Gullborg and Zerk patents were known to and used by other persons in this and foreign countries and patented and described in other Letters Patent for this and other countries, the prior uses and names of which persons and the numbers and dates of which Letters Patent are at present unknown to defendant and which when ascertained, defendant prays leave to insert by amendment in its answer.

23. Defendant, further answering, avers that the claims of the Letters Patent sued upon cannot be construed to cover or include anything ever made, sold or used by this defendant, and that they are invalid and ineffectual for such purpose, not only in view of the state of the prior art, but also because of the cancellations of the declarations amounting to disclaimers, and of the express limitations and restrictions, made or assented to by said patentees in their application for said Letters Patent, and moreover, made or assented to in consequence of repeated rejections and objections by the Patent Office which were acquiesced in by the applicants as a prerequisite to obtaining the allowance of their said Letters Patent as finally issued, all as disclosed by the file wrapper of said said Letters Patent, ready in Court to be produced.

24. Defendant further answering says that the device which have been sold by it, alleged to be infringements of the Gullborg and Zerk patents aforesaid, were sold for replacement and repair purposes as defendant had been advised that it had the lawful right to do, defendant having in no instance furnished the fixed nipples which are a permanent part of an automobile chassis, and that defendant has therefore not sold any of said articles for purposes of a complete, new installation.

All of which matters and things this defendant is ready and willing to aver, maintain and prove, as this Honorable Court shall direct, and therefore prays that the Bill of Complaint herein may be dismissed with its reasonable

cost, charges and disbursements in this behalf most wrongfully sustained, and to be taxed.

The Frank Miller Co., by F. J. Semple, President. Attest: A. T. Reed, Secretary. E. Hayward Fairbanks, 115 Westminster Ave., Merchantville, N. J., Solicitor for Defendant. Leonard L. Kalish, of Counsel for Defendant.

[fol. 104] State of New Jersey,
County of Camden, ss:

F. J. Semple, having been duly sworn according to law, deposes and says that he is the President of the Frank Miller Company, the defendant herein; that he has read the foregoing answer by him subscribed, and knows the contents thereof, and that the facts therein set forth are true to the best of his information and belief.

F. J. Semple.

Subscribed and sworn to before me, this 25th day of July, 1927.

Charles R. Ferris, Notary Public for New Jersey. (Seal.) My commission expires June 26, 1931.

I hereby certify that the foregoing is a true copy of the original on file in my office.

George T. Cranmer, Clerk, per L. M. Zarp, Deputy.

[fol. 105] United States District Court, District of New Jersey

In Equity

No. 2759

The Bassick Manufacturing Company, Plaintiff,

vs.

The Frank Miller Company, Defendant

Amendment to Answer—Filed Nov. 4, 1927

Now comes defendant by leave of Court obtained, and amends its Answer heretofore filed, as follows:

In the seventeenth paragraph on page 5 of the Answer, after the words "null and void:—" insert "No. 499,541, Pay et al., June 13, 1893."

Leonard L. Kalish, E. Hayward Fairbanks, Counsel for Defendant.

Plaintiff's counsel consents that the foregoing amendment may be entered with the same force and effect as if by leave of Court heretofore obtained.

Samuel H. Richards, French, Richards & Bradley, Counsel for Plaintiff.

Filed October 15, 1927.

[fol. 106] UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

No. 2759

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

AMENDMENT TO ANSWER—Filed Nov. 17, 1927

In paragraph 16 on page 5 of the Answer, at the end of the list of prior United States patents, insert:

No. 1,201,414	To Winkley	Oct. 17, 1916
" 1,307,733	" Gullborg	June 24, 1919

In the same paragraph and on the same page of the Answer, after the list of prior French patents, insert:

"Publication in the French journal Omnia, dated April 25, 1914, 9 Annee 434, page 258."

In paragraph 17 on page 5 of the Answer, add to the list of prior art United States patents the following:

No. 1,383,306	To Jacques	July 5, 1921
" 1,400,871	" Crotty	Dec. 20, 1921

In paragraph 21 on page 6 of the Answer, in line 3, cancel "of the" first occurrence; same line, after the word "claims" insert —14 and 15—.

In line 4 of the same paragraph, before "subject" insert —sole—; in the same line, cancel "of the".

In line 5 of the same paragraph, after "claims" insert —3, 4 and 5—.

On page 7 of the Answer, following paragraph 24, add the following paragraphs:

"25. As an additional and separate defense in its behalf, defendant alleges:

(a) That the only alleged novel element in claims 14 and 15 of the Gullborg Patent in suit, to wit, the 'grease cup is recited in said claims 14 and 15' in 'combination with' any grease pump, hose and coupler which may be connected to said grease cup;

[fol. 107] (b) That said 'grease cup' also forms the sole subject matter of claims 3, 4 and 5 of the Gullborg Patent No. 1,307,733;

(c) That said 'grease cups' have been and are sold outright by plaintiff as a separate article of manufacture under claims 3, 4 and 5 of the Gullborg Patent No. 1,307,733, and without any restrictions or conditions as to their use;

(d) That said 'grease cups' manufactured and sold outright by plaintiff under its Gullborg Patent No. 1,307,733 have but one purpose, to wit, to receive lubricant under pressure, and that in order to use said grease cups for this purpose it is necessary to connect a grease pump onto said grease cups by some coupling means for co-acting with the bayonet lugs or pins of said grease cups, all as clearly disclosed in the specification and drawings of said Patent No. 1,307,733;

(e) That the purchasers of said 'grease cups' under claims 3, 4 and 5 of Gullborg Patent No. 1,307,733 acquired from the plaintiff a constructive license to use said 'grease cups' in their naturally intended manner, to wit, by connecting a grease pump of some kind onto the 'grease cups' and forcing grease thereinto; and

(f) That, therefore, said claims 14 and 15 of Gullborg Patent No. 1,307,734 are invalid—

(1) Because they claim nothing more than the obviously intended use of the 'grease cups' sold by plaintiff under claims 3, 4 and 5 of Patent No. 1,307,733, and

(2) Because the subject matter of claims 14 and 15 of the patent in suit involves no invention over or distinct from the invention covered by claims 3, 4 and 5 of Gullborg Patent No. 1,307,733, and

(3) Because said claims 14 and 15 thus tend to deprive the outright purchasers of plaintiff's 'grease cups' and constructive licensees under claims 3, 4 and 5 of plaintiff's Gullborg Patent No. 1,307,733, of the obviously intended and sole use for which said 'grease cups' were sold.

23. As an additional and separate defense in its behalf, defendant alleges:

(a) That the 'grease cups' under plaintiff's Gullborg Patent No. 1,307,733 have been sold by plaintiff in very large quantities for about the past nine years, first, in the automotive industry and more recently in the industrial fields, under its trade-mark "Alemite";

(b) That the plaintiff has introduced its so-called 'Alemite grease cups' under its Gullborg Patent No. 1,307,733 and has flooded both the automotive and indus- [fol. 108] trial fields with the 'grease cups' largely to the exclusion of other competing grease cups for pressure lubrication;

(c) That the introduction of plaintiff's 'Alemite grease cups' under its Gullborg Patent No. 1,307,733 and its wide distribution in the automotive and industrial fields, to the exclusion of other competitive equipment, resulted primarily from certain market conditions prevalent at the time of its introduction, as well as from a gigantic national advertising program initiated and fostered by the plaintiff on behalf of its said product and also as a result of tremendous sales effort and pressure, and the acquiring by plaintiff of the successful competing companies;

(d) That said 'Alemite grease cups' under Gullborg Patent No. 1,307,733 have been sold by plaintiff not only outright and without any conditions or limitations whatsoever, but have been sold to the public at large for about the past nine years without any actual notice to the purchasers

or public of any broad monopoly solely of the 'use' of said 'grease cups' as is now apparently contended for by plaintiffs under claims 14 and 15 of the Gullborg Patent No. 1,307,734 in suit;

(e) That said 'grease cups' under Gullborg Patent No. 1,307,733 were not bought by the public from the plaintiff, with any understanding that they could not be used in any way whatsoever except by employing a grease pump, hose and coupler prescribed by plaintiff under claims 14 and 15 of the Gullborg Patent in suit;

(f) That said 'Alemite grease cups' under Gullborg Patent No. 1,307,733, which were bought outright as a separate article of manufacture, by a public unsuspecting of a monopoly solely of the use of the 'grease cups' under claims 14 and 15 of the Gullborg Patent in suit, now constitute a very large majority — 'lubricant receptacles' in the automotive and industrial fields;

(g) That since said 'Alemite grease cups' under Gullborg Patent No. 1,307,733 comprise a very large majority of the 'lubricant receptacles' in the automotive and industrial fields, therefore, an exclusive monopoly at this late date, solely of the 'use' of said grease cups under claims 14 and 15 of the Gullborg Patent in suit, or an exclusive monopoly of all lubricant dispensing pumps of any old construction and any description whatsoever, for putting grease into these 'grease cups', would be paramount to and co-extensive with a monopoly of grease consumed through these grease cups and would, in addition, constitute a con- [fol. 109] trolling influence over the many millions of outright purchasers and users of these 'grease cups';

(h) That such grease monopoly and controlling influence in the automotive and industrial fields

(1) is unjustifiable either in law or in equity by any patent rights upon a mere and relatively trifling mechanical improvement;

(2) is contrary to public interest and policy, and

(3) plaintiff should be estopped at this late date from asserting such broad monopoly under claims 14 and 15."

Leonard L. Kalish, E. Haywood Fairbanks, Counsel for Defendant.

Plaintiff's counsel consents that the foregoing amendment may be entered with the same force and effect as if by leave of Court heretofore obtained.

Samuel H. Richards, French, Richards & Bradley,
Counsel for Plaintiff.

I hereby certify that the foregoing is a true copy of the original on file in my office.

George T. Cranmer, Clerk, per L. M. Zarp, Deputy.

[fol. 110] UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

MOTION FOR PRELIMINARY INJUNCTION—Filed Aug. 16, 1927

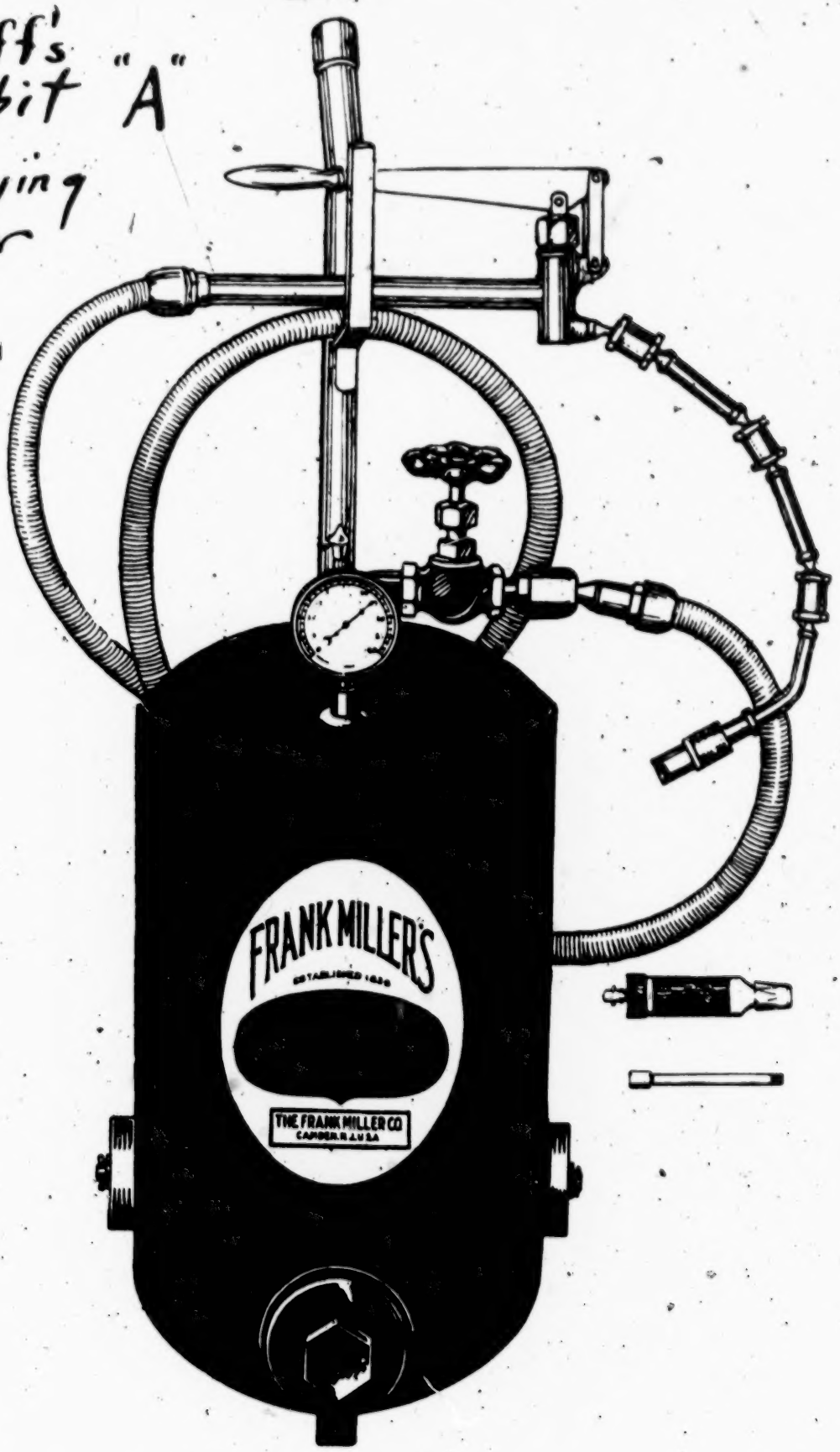
Now comes The Bassick Manufacturing Company, the plaintiff herein, by its solicitors and counsel, and moves for an order directing the issuance of a preliminary injunction enjoining and restraining the defendant herein, its officers, agents, employes, associates and confederates from making, using or selling the lubricating apparatus complained of, particularly the compressors and couplers referred to in the advertising matter of The Frank Miller Company, a photostat copy of which is attached hereto as Exhibit A, or any other device embodying the inventions described and claimed in claims 1, 2, 14 and 15 of Gullborg patent No. 1,307,734 and/or claims 2, 3 and 5 of Zerk patent No. 1,475,980, or any of the parts thereof in direct or contributory infringement of the said claims of the said patents, either for original equipment or for replacement under the guise of "repairs" or otherwise, and from offering or advertising so to do and from aiding or abetting or in any way contributing to the infringement of the said claims of the said patents or either of them.

French Richards & Bradley, Samuel H. Richards,
Williams Bradbury McCaleb & Hinkle, Solicitors
and Counsel for The Bassick Manufacturing Co.

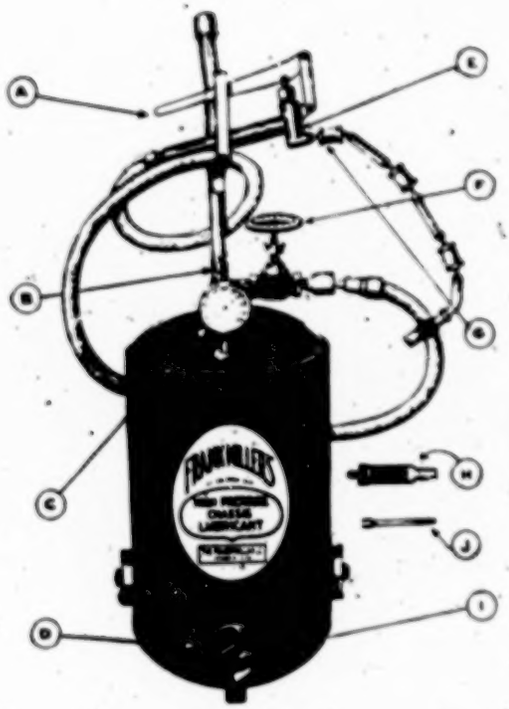
(Here follow photolithographs, side folios 111-114.)

Plaintiff's Exhibit "A"

Accompanying Motion for Preliminary Injunction



Defendant's Exhibit No. 36
Semple Affiduvit



FRANK MILLER
High Pressure Chassis Lubricator

FOR LUBRICATING CARS EQUIPPED WITH ALEMITE, ZERK OR DOT SYSTEMS

The FRANK MILLER High Pressure Chassis Lubricator is the highest development in lubricating systems yet brought forth. It will last indefinitely if used with reasonable care. It is a mechanical device, well-made of the best materials, and perfectly put together and finished. It is designed to give the highest mechanical service, but no mechanical device, however sturdy, will stand unwarranted abuse.

DIRECTIONS FOR USE

NOTE: When shipped, ***FRANK MILLER*** Lubricators contain 30 lbs. ***FRANK MILLER'S*** High Pressure Lubricant, and it is only necessary to obtain air pressure from 80 to 100 lbs. in order to use it.

TO RE-FILL LUBRICATOR

1. Release air pressure on tank by removing cap on air valve "B" and holding plunger down until gauge "C" shows that air in tank has been exhausted.
2. Lay Lubricator on floor with plug "I" up and remove plug.
3. Fill Lubricator about two-thirds full and replace plug. The special metallic gasket with which plug is equipped, eliminates the necessity of taking up on the plug tighter than can conveniently be done with a 14" wrench.
4. Stand Lubricator upright, making sure that valve "F" which controls flow of grease through hose is closed.
5. Remove cap on air valve "B" and attach power or hand air pump. Gauge on tank should show 80 to 100 lbs. air pressure. Remove hose from air valve and replace cap.
6. When Lubricator is not in use, valve "F" should be closed and handle "A" on Booster should be down. This precaution will prevent loss of grease.
7. Do not attempt to remove plug "I" unless air has been exhausted from tank.

TO LUBRICATE ALEMITE EQUIPPED CARS

Move Lubricator to side of car and open valve "F". Wipe Alemite nipple so that it is free from dirt or grit. Attach coupling "G" on end of Ball Jointed hose to Alemite fitting. With coupling attached to fitting, operate Booster as a pump, which develops 8,000 to 10,000 lbs. pressure.

If pressure developed by Booster does not force grease into bearings, remove coupling and see if ball in end of Alemite fitting is free. If it is stuck, tap ball lightly until free.

If it is then found impossible to force grease into bearings, remove Alemite nipple and clean it out. In many cases where the fitting is not wiped off thoroughly before lubrication is started, dirt and grit is forced into the nipple, clogging up the small hole and making it impossible to force grease into bearing.

If, after these remedies are tried, it is found impossible to force grease into the bearing, in order to be sure of proper lubrication, bearing should be loosened or taken apart and cleaned, as it has probably become frozen.

TO LUBRICATE ZERK EQUIPPED CARS

Remove Ball Jointed Hose from Booster and replace with Zerk Adapter "J". For best results, hold Booster in left hand and force Adapter against Zerk fitting on car, keeping the Booster as near as possible in line with the fitting. Operate Booster as explained above.

TO LUBRICATE DOT EQUIPPED CARS

Attach Dot Adapter "H" to fitting on car. Attach Ball Jointed hose to Alemite fitting on the end of the Dot Adapter, and operate the Booster as a pump.

The Dot Adapter must be held tightly screwed to the fitting on the car, to prevent force of grease unscrewing Adapter.

PRINTED IN U. S. A.

Defendant's 113 Exhibit No. 36
Semple Affidavit

FRANK MILLER PRODUCTS

FRANK MILLER
Gear Case Cleaner

USE of the **Frank Miller Gear Case Cleaner** makes the removal of worn out grease from gear cases a cleaner, quicker and simpler operation.

IT is especially convenient for removing worn grease from the differential housings of Fords, Chevrolets, Dodges and other cars which have an opening for filling in the side of the housing. The nozzle will reach the bottom of the gear case.

IT is superior to cleaners of the "squirt-gun" type as it operates on the "pump" principle so that the nozzle need not be withdrawn until grease has all been removed.

USE of the **Frank Miller Gear Case Cleaner** by Dealers will enable them to sell more grease—enough to replace the worn out grease instead of only a half pound or pound to fill the housing.

—SPECIFICATIONS—

BARREL: 11½ inches long, 1½ inch diameter, 20 gauge, baked enamel.
PISTON ROD: 13 inches long, ⅜ inch diameter.
CAP: Machined
HANDLE: Hardwood stained.
SUCTION NOZZLE: Steel ½ in. diameter.
DISCHARGE NOZZLE: Steel ½ inch diameter

Packed 1 to a corrugated case.

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Defendant's Exhibit No. 36
Semple Affidavit

FRANK MILLER PRODUCTS

FRANK MILLER'S
High Pressure Lubricator

The Frank Miller High Pressure Lubricator consists of a welded, steel tank 10 inches in diameter and 22 inches in height, which, when shipped, contains 30 lbs. of Frank Miller High Pressure Chassis Lubricant. The tank is mounted on two wheels, equipped with a handle which extends 36 inches from the floor, by means of which it may be easily moved from one greasing job to another. It will stand 100 pounds pressure.

The Lubricator is equipped with 8 feet of hose, on the tank end of which there is a brass shut-off valve to control the flow of grease. To the other end of the hose is attached a High Pressure Booster of an easily operated design, by means of which the grease, forced to the end of the hose by air pressure, may be injected into high pressure lubrication connections at a pressure as high as 5000 pounds. The Booster is equipped with an attachment for use in lubricating cars equipped with the Alemite System as well as an attachment for use on cars equipped with the Zerk or Dot Systems. By detaching the short metallic hose, gear cases also may be filled.

Re-Filling Pump

There is a needle air valve with a standard tire valve thread so that air pressure in tank may be obtained with a power tire pump or a hand, auto tire pump. There is a pressure gauge to show pressure in tank which should be from 80 to 100 pounds.

Pumps, like that illustrated, are furnished dealers at small cost for use in refilling the Frank Miller High Pressure Lubricator.

FILED
Jul 5 1927
MAR 27 1928
AT 9 O'CLOCK A. M.
GEORGE D CRANMER, Clerk

BEST SINCE 1838

[fol. 115] UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY.

In Equity

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

AFFIDAVIT OF J. E. OTIS, JR.

STATE OF ILLINOIS,
County of Cook, ss:

J. E. OTIS, JR., being duly sworn, deposes and says:

I am the J. E. Otis, Jr., Vice President and General Manager of The Bassick Manufacturing Company, who signed an affidavit of even date for use in this cause in support of a motion for a prelininary injunction against the defendant. I am familiar with the activities of concerns competing with The Bassick Manufacturing Company in the manufacture and sale of high pressure lubricating equipment, including The Frank Miller Company the defendant in the above entitled cause.

I have obtained and submit herewith as Exhibit M a specimen of the equipment charged to be an infringement in this suit.

I submit herewith as Exhibit N an Alemite-Zerk adapter intended for use in lubricating machines equipped with Alemite-Zerk fittings of The Bassick Manufacturing Company.

I submit herewith as Exhibit O an assortment of Alemite-Zerk fitting such as extensively manufactured and sold by The Bassick Manufacturing Company, the same being applied to the bearings in the manner described in Zerk patent No. 1,475,980.

(Sgd.) J. E. Otis, Jr.

Subscribed and sworn to before me this 29th day of July, 1927.

(Sgd.) Frieda A. Neuffer, Notary Public. (Seal.)

[fol. 116] UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

ORDER TO SHOW CAUSE WHY A PRELIMINARY INJUNCTION SHOULD NOT ISSUE—Filed Aug. 16, 1927

This cause having come on to be heard on motion of solicitors and counsel for the plaintiff, The Bassick Manufacturing Company, for an order to show couse why a preliminary injunction should not issue, and upon reading the plaintiff's bill of complaint and motion for preliminary injunction and the affidavits filed in support thereof,

It is ordered, that the above named defendant, The Frank Miller Company, show cause if any it has before this court in the City of Trenton, N. J., on the 11th day of October, 1927 at ten o'clock A. M., or as soon thereafter as counsel can be heard, why a preliminary injunction should not issue pursuant to the bill of complaint and the motion for a preliminary injunction herein; and

It is further ordered, that the defendant, The Frank Miller Company, have until and including the 16th day of September, 1927, to file and serve upon the plaintiff's solicitors affidavits, papers and exhibits, if any, to be used at the hearing upon the said motion for a preliminary injunction; and

That the plaintiff have until the 6th day of October 1927, for serving and filing reply affidavits.

(Sgd.) J. L. Bodine, United States District Judge.

[fol. 117] UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

No. 2759

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

EXCERPTS FROM TRANSCRIPT OF HEARING BEFORE HON. JOSEPH L. BODINE, AT TRENTON, N. J., NOVEMBER 29, 1927

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The Court: Let me ask you another question. How different would this record be on final hearing from what it is on application for preliminary injunction?

Mr. Kalish: I would say so far as claims 14 and 15 of the Gullborg patent are concerned the record would be no different.

The Court: How about claims 2, 3 and 5 of the Zerk patent?

Mr. Kalish: With regards to claims 2, 3 and 5 the only difference to be made in the record, and that is only if there is a dispute on the point, is some expert testimony as to the mechanics involved in the prior art, and I thing that we could pretty nearly stipulate as to claims 2, 3 and 5 of Zerk.

Mr. Philbin: The plaintiff would have no expert witnesses with respect to the claims of the Zerk patent, nor the claims of the Gullborg patent here in suit.

Mr. Kalish: We do not have in mind the Zerk and Gullborg claims, but we do have in mind particularly the claims of the prior art, which I have mounted on that large sheet (indicating), and it is merely a question whether the court feels sufficiently familiar with

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mechanics to take its own views, or whether the court wishes to listen to a mechanical expert.

[fol. 118] The Court: I do not care much for expert testimony, except in the radio art.

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The Court: * * * I was going to suggest that since there is no actual injury occurring to these patent rights at the moment that it might be just as well to treat the case as on final hearing as soon as Mr. Philbin's affidavits are filed, and file briefs so that the case may be decided affirmatively and authoritatively in this district and you may go as rapidly as you desire, whoever may lose, to the Circuit Court of Appeals.

Mr. Busser: I will be very glad to do that. We want to get to the Court of Appeals, but not with pro-formal decision.

Page 53

The Court: I do not give pro-formal decisions. People may not like my decisions, but I do not give pro-formal decisions.

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Mr. Kalish: I understood that your Honor was to consider this as a final hearing. Am I correct in that understanding?

The Court: I think I did make some suggestion that if the record was the same on this application I saw no reason when it came to filing briefs in the matter the case should not be dealt with as though it were on final hearing.

Mr. Kalish: We all agree to that.

Mr. Philbin: Yes, your Honor.

I hereby certify that the foregoing is a true copy of the original on file in my office.

George T. Cranmer, Clerk, per L. M. Zarp, Deputy.

[fol. 119] UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

No. 2759

THE BASSICK MANUFACTURING CO., Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

NOTICE—Filed Feb. 24, 1928

Messrs. Wiedersheim & Fairbanks,
DeLong Building, Philadelphia, Pa.

GENTLEMEN:

Please take notice that on Tuesday, February 28, 1928, at 9:30 o'clock A. M., or as soon thereafter as counsel can be heard, we shall present to his Honor, Judge Joseph A. Bodine, sitting in the Federal Building at Trenton, New Jersey, plaintiff's Motion to Dismiss the above entitled cause.

A copy of the said Motion and the Affidavits therein referred to is handed to you herewith.

(Sgd.) Lynn A. Williams. (Sgd.) Williams, Bradbury, McCaleb & Hinkle, Solicitors and Counsel for Plaintiff.

Receipt of the foregoing notice acknowledged this day of February, A. D. 1928.

—— ——, Solicitors and Counsel for Defendant.

[fol. 120] UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

No. 2759

THE BASSICK MANUFACTURING CO., Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

MOTION—Filed Feb. 24, 1928

Now comes the plaintiff, by its solicitors and counsel, and moves that the above entitled cause be dismissed without prejudice, with costs to the defendant.

This motion is based upon the record and proceedings herein, upon the accompanying affidavits of Elwood Hansmann and J. E. Otis, Jr., and the exhibits submitted therewith.

(Sgd.) French, Richards & Bradley. (Sgd.) Williams, Bradbury, McCaleb & Hinkle, Solicitors and Counsel for Plaintiff.

[fol. 121] UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

No. 2759

THE BASSICK MANUFACTURING CO., Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

AFFIDAVIT OF J. E. OTIS, JR.

STATE OF ILLINOIS,
County of Cook, ss:

J. E. Otis, Jr., being first duly sworn deposes and says:

I am a resident of Chicago, Illinois, and am a vice-president and the active chief executive officer of The Bassick Manufacturing Company, the plaintiff in the above entitled suit. I keep myself informed of the status of the various patent infringement suits brought by my company and am familiar with the record and proceedings herein.

I am aware the The Bassick Manufacturing Company has brought a suit in the United States District Court, for the Western District of Tennessee, Western Division, against The R. M. Hollingshead Company of Camden, New Jersey, but having a regular and established place of business at Memphis, Tennessee, for infringement of Gullborg patent 1,307,734 and Zerk patent 1,475,980 upon which the present case against The Frank Miller Co. is based. I am aware that in the Hollingshead suit a preliminary injunction order was entered on March 21, 1927, and modified on April 20, 1927, to the extent that claim 12 was struck out of the order for preliminary injunction, as set forth in the affidavit of Elwood Hansmann.

I am making this affidavit in support of plaintiff's motion to dismiss the suit against The Frank Miller Co. without prejudice and with costs to the defendant.

On Thursday, February 9, 1928, I received a visit from Mr. R. M. Bagley, vice-president of The R. M. Hollingshead Company, Camden, N. J., and during my interview with him we discussed the suit which The Bassick Manufacturing Company brought against The R. M. Hollings-
[fol. 122] head Company. Mr. Bagley informed me that The Frank Miller Co. of Camden, N. J., was and is a subsidiary of The R. M. Hollingshead Company, it having been purchased by the Hollingshead Company a few years ago for the purpose of selling the jobbing trade under a different brand the same products which the Hollingshead Company sells to the dealers direct. My interview on February 9 with Mr. Bagley was the first intimation that I had received that The R. M. Hollingshead Company owned or controlled The Frank Miller Company, which The Bassick Manufacturing Company had sued for patent infringement in a case involving substantially identically the same lubricating equipment as was enjoined by the United States District Court in the suit brought against the R. M. Hollingshead Company, as shown by the exhibits submitted with the affidavit of Elwood Hansmann, which I have read.

Subsequent information received by me confirms Mr. Bagley's statement that The R. M. Hollingshead Company owns and controls The Frank Miller Co., and that four of the five directors of The R. M. Hollingshead Company, viz., R. M. Hollingshead, R. M. Bagley, C. W. Tomlinson and R. M. Hollingshead Jr., comprise four of the six directors of The Frank Miller Co.

A financial report just received by me from a commercial agency states that "The company is controlled by The R. M. Hollingshead Company and it occupies a portion of the building of The R. M. Hollingshead Company." The report also states that "It is reported the company has done a good trade, has a warehouse in San Francisco which is also occupied by The R. M. Hollingshead Company, who is said to take the output of the company," and also that F. J. Semple, president of The Frank Miller Co. was formerly vice president of The R. M. Hollingshead Company.

The attorneys for The Bassick Manufacturing Company have taken steps to procure certified copies of the articles of incorporation of The R. M. Hollingshead Company and The Frank Miller Co. and copies of the annual reports of these concerns showing these facts, and these certified copies will be submitted with this affidavit or filed in court when received from the Secretary of State of New Jersey.

(Sgd.) J. E. Otis, Jr.

Subscribed and sworn to before me this 22nd day of February, 1928.

(Sgd.) Szada Goldberg, Notary Public. (Seal.)

[fol. 123] UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

No. 2759

THE BASSICK MANUFACTURING CO., Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

AFFIDAVIT OF ELWOOD HANSMANN

STATE OF ILLINOIS,
County of Cook, ss:

Elwood Hansmann, being first duly sworn, deposes and says:

I am a resident of Chicago, Illinois, and am associated with Williams, Bradbury, McCaleb & Hinkle, solicitors and

counsel for The Bassick Manufacturing Company in the above entitled cause. I am familiar with the record and proceedings herein and with the record and proceedings in a suit pending in the United States District Court for the Western District of Tennessee, Western Division, entitled The Bassick Manufacturing Company vs. The R. M. Hollingshead Company, Equity No. 935. I am making this affidavit in support of plaintiff's motion to dismiss.

The Bassick Manufacturing Company on or about August 17, 1926, filed a Bill of Complaint against The R. M. Hollingshead Company, charging infringement of Gullborg patent No. 1,307,734 involved herein. Thereafter, to-wit on October 30, 1926, the plaintiff filed an amended Bill of Complaint against the defendant based upon Gullborg patent No. 1,307,734 and Zerk patent No. 1,475,980, also involved in this cause. Thereafter the defendant filed its answer to the amended Bill of Complaint. Plaintiff presented its Motion for a Preliminary Injunction to restrain the defendant from infringing on the said patents. This Motion coming on to be heard before the Honorable H. B. Anderson, District Judge, upon the affidavits of D. A. Beezley, O. A. Cumming, and Ernest W. Davis, identifying the devices complained of as having been sold by the defendant; and the matter having been argued by counsel for the respective parties, and the Court being advised in the [fol. 124] premises, an order for a Preliminary Injunction was entered on March 21, 1927 against The R. M. Hollingshead Company, restraining "the defendant, its officers, agents and employees, pending this suit, from making, using or selling any of the forms or parts of lubricating apparatus referred to in the said affidavits as having been sold by the defendant."

A certified copy of the amended Bill of Complaint, Answer to amended Bill of Complaint, affidavits of D. A. Beezley, O. A. Cumming and Ernest W. Davis, and the Order for Preliminary Injunction is submitted herewith. The said Order for Preliminary Injunction was based upon claims 1, 2, 3, 4, 5, 6, 8, 12, 14 and 15 of the said Gullborg patent No, 1,307,734, and claims 2, 3 and 5 of the said Zerk patent No. 1,475,980.

Thereafter, to wit on April 20, 1927, an "Order Modifying Preliminary Injunction" was entered by his Honor, Judge H. B. Anderson, striking out of the order for Pre-

liminary Injunction claim 12 of the Gullborg patent, the said claim having been held to be invalid by the Circuit Court of Appeals for the Sixth Circuit in an opinion rendered on March 23, 1927, as will more fully appear from the copy of the said opinion on file herein. Otherwise the said Preliminary Injunction Order of March 21, 1927, is in full force and effect and has not been modified. A certified copy of the said Order of modification is submitted herewith.

I submit herewith a drawing which I believe is a true and correct drawing of the pin type coupler submitted with the defendant's lubricant compressor as Exhibit "M" of the affidavit of J. E. Otis, Jr., dated July 29, 1927, and filed herein.

I am aware that defendant has filed an "Expert Affidavit of Hugo C. Gibson Contra Motion for Preliminary Injunction," in which he submits with page 29 of his affidavit a drawing of "Defendant's coupler in suit" which is somewhat at variance with the drawing submitted by me. I note, however, that the drawing submitted by Mr. Gibson illustrates a construction substantially identical to that shown in Exhibit "K" of the Affidavit of Ernest W. Davis illustrating one of the defendant's constructions enjoined in the aforesaid suit against The R. M. Hollingshead Company.

I observe that in the aforesaid suit against The R. M. Hollingshead Company, Affidavits of R. M. Hollingshead and R. M. Bagley were filed in behalf of the defendant. I am informed and believe that these gentlemen are directors of The Frank Miller Company, the defendant herein. I [fols. 125 & 126] am also aware that the law firm of Wiedersheim & Fairbanks, DeLong Building, Philadelphia, represents The R. M. Hollingshead Company and The Frank Miller Company in the suits brought by The Bassick Manufacturing Company.

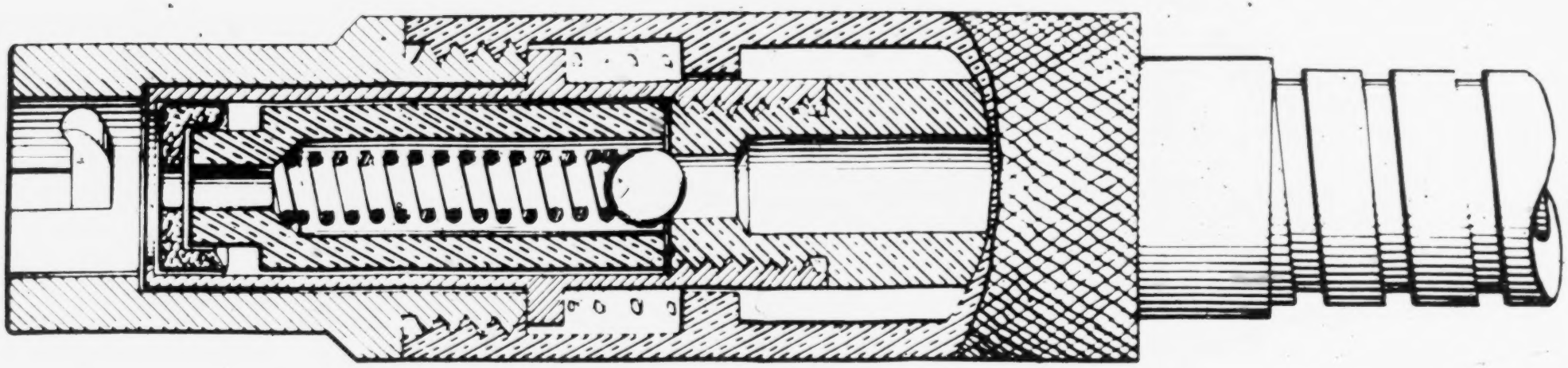
(Sgd.) Elwood Hansmann.

Subscribed and sworn to before me this 22nd day of February, 1928.

(Sgd.) Szada Goldberg, Notary Public. (Seal.)

(Here follows drawing, side folios 127 and 128.)

Drawing Accompanying
Affidavit of Elwood Hansmann



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I hereby certify that the foregoing is a true copy of the original on file in my office.

George T. Cranmer, Clerk, per L. M. Zarp, Deputy.

[fol. 129] UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

No. 2759

THE BASSICK MANUFACTURING CO., Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

ORDER—Filed March 21, 1928

This cause having come on to be heard before the Court upon plaintiff's motion to dismiss, the same having been argued by counsel, and the Court being fully advised in the premises, it is

Ordered, that the above entitled cause be dismissed, with the taxable costs to the defendant to be taxed by the clerk.

J. L. Bodin, United States District Judge.

I hereby certify that the foregoing is a true copy of the original on file in my office.

George T. Cranmer, Clerk, per L. M. Zarp, Deputy.

[fol. 130] IN UNITED STATES DISTRICT COURT

PLAINTIFF'S EXHIBIT 8

STIPULATION AS TO TESTIMONY OF J. E. OTIS, JR.—Filed June 23, 1928

It is stipulated by and between solicitors and counsel for the respective parties in the above-entitled cause that if J. E. Otis, Jr., were called as a witness on behalf of the plaintiff, he would testify as follows:

I am a vice-president and general manager of The Bassick Manufacturing Company, of Chicago, Illinois, the plaintiff in the above-entitled suit. As the chief executive officer of The Bassick Manufacturing Company, I have become familiar with its business, its product and its patents and with the art to which they relate.

The Alemite Lubricating System as Manufactured and Sold by The Bassick Manufacturing Company

Since 1919, The Bassick Manufacturing Company has been manufacturing and selling a high pressure lubricating system embodying the inventions disclosed in Winkley reissue patent No. 14,667 and in Gullborg United States patents Nos. 1,307,733 and 1,307,734. It has always been sold under the registered trademark "Alemite". Each installation of this lubricating system comprises a plurality of nipples or so-called pin fittings, each adapted to be screwed into a hole or conduit leading to the bearing of an automobile or other mechanism to be lubricated; also a single high pressure lubricant compressor having a discharge conduit connected at one end with the compressor and provided at its free end with a coupling member. The coupling member and the pin fittings have been provided with coacting means whereby the coupling member of the compressor can be successively attached to the various pin fittings associated with the various bearings of the automobile or other mechanism to be lubricated. The coupling or attaching means has been adapted in accordance with Gullborg patent No. 1,307,734 to permit of quick and easy attachment and detachment between the coupling member and the pin fittings and the parts have been so equipped and related as to effect a lubricant sealing relation between the coupling member and the pin fittings in such manner as to prevent the leakage of grease or lubricant at the point of junction between the coupling member and the pin fitting, this sealing means comprising a spring-pressed leather-faced plunger adapted under the pressure of the spring [fol. 131] to effect an initial seal between the coupling member and the head of the pin fitting, the plunger being subjected to the pressure of lubricant when developed in the compressor in such manner as to tighten the sealed joint between the coupling member and the head of the pin fitting correspondingly with the degree of pressure developed within the compressor so as to prevent effectually the leakage of grease or lubricant no matter how high a degree of pressure might be developed in the compressor.

Upon the attachment of the coupling member to the pin fitting, the leather-faced plunger of the coupling member is moved inwardly within the bore of the coupling member and against the compression of the spring above referred

to, with the result that the spring has served in a measure to lock the coupling member to the pin fitting through the agency of the pins extending from diametrically opposite sides of the pin fitting and the bayonet slots with which the shell of the coupling member has been provided.

Upon the detachment of the coupling member from the pin fitting the spring causes the plunger to move outwardly to its normal position where it rests against a shoulder in the bore of the shell of the coupling member. This slight outward movement of the plunger at the moment of detaching the coupling member from the co-operating pin fitting has caused an excess of lubricant which would otherwise be extruded to be drawn back into the coupling member through the aperture in the plunger, thereby preventing the extrusion of grease. If it were not for this action of the apertured plunger and its associated spring, a small quantity of grease would be left outside of the aperture of the plunger upon each detachment of the coupling member from a pin fitting to which it had supplied lubricant under pressure, and after a few detachments of the coupling member to and from a succession of pin fittings, there would be an accumulation of grease in and about the coupling member which would soil the hands of a person eng-ged in applying lubricant to the several bearings of an automobile or other machine.

Without attempting to describe in detail the construction of the lubricating equipment thus manufactured and sold by The Bassick Manufacturing Company, and without attempting to enumerate all of the advantages of this construction and equipment, I will say that the system and equipment as above described and conforming substantially with the disclosures of the said Gullborg patent was first [fol. 132] put on the market by a predecessor of The Bassick Manufacturing Company, namely, The Alemite Die Casting & Manufacturing Company, of Chicago, in 1918. It immediately found great favor among automobile owners and users and among manufacturers of automobiles. From that time to this, approximately thirteen million automobiles have been equipped with this system and means of lubrication.

The pin fittings referred to have been made in various forms, but always with identically the same tubular member, the same pin, the same ball valve and the same valve

actuating spring located between the pin and the ball valve. The form of the pin fittings has differed in order to enable them to be screwed into the holes or conduits leading to the variously located bearings of an automobile or other machine and so as to bring the characteristic components of the pin fitting as above enumerated into a position and angle such as to facilitate the easy attachment and detachment of the co-operating coupling member. Thus, the pin fittings have been made in the form of "straights" and in the form of elbows, some of them 90° elbows, some of them 25° elbows, some of them 65° elbows, etc. These various forms of pin fittings have been provided with various threads for screwing them into holes or conduits provided with differing threads, as for example, ⅛" pipe thread, ¼" pipe thread, etc.

The Alemite-Zerk Lubricating System as Manufactured and Sold by The Bassick Manufacturing Company

In April, 1924, The Bassick Manufacturing Company purchased the lubricating apparatus business of the Allyne-Zerk Company of Cleveland, Ohio, and has since continued the manufacture and sale of equipment under Zerk patent No. 1,475,980, of December 4, 1923. This equipment has been marketed under the name "Alemite-Zerk", each installation comprising a plurality of fittings, each adapted to be screwed into a bearing, and a compressor and coupler adapted for use in conjunction therewith. The Zerk construction does away with the necessity of providing dust caps, the compressors may be handled in one hand, and there is a metal to metal contact provided between the feeding nozzle element and the lubricant receptacle element, preventing the escape of lubricant while it is being applied to the bearing under high pressure.

[fol. 133] The Great Commercial Success of the Plaintiff's Lubricating Equipment.

Since 1919 The Bassick Manufacturing Company has sold approximately 349,000,000 pin fittings forming parts of the "Alemite" high pressure lubricating system. The business of The Bassick Manufacturing Company has been rapidly expanding and increasing so that during the month of February, 1928, it shipped approximately 5,600,000 of these pin fittings, of which by far the larger percentage

were straight fittings and a smaller percentage were fittings of the elbow type.

Likewise, the sales of the Alemite-Zerk high pressure lubricating system and its component parts has grown tremendously and since January 1, 1925, the Bassick Manufacturing Company has sold approximately 100,000,000 nipples forming parts of this Alemite-Zerk system. In the month of February, 1928, it shipped approximately 6,400,000 Alemite-Zerk fittings, of which 4,600,000 were straight fittings and 1,800,000 were fittings of the elbow type.

The Bassick Company's sales of Alemite equipment have been as follows:

Sales of Alemite Pin Fittings

1919	5,737,055
1920	16,750,611
1921	14,780,470
1922	31,444,216
1923	43,520,864
1924	33,000,000
1925	51,873,288
1926	50,636,983
1927	56,849,108

Sales of Compressors with Alemite Couplers

1919	170,000
1920	498,000
1921	438,000
1922	978,000
1923	1,460,000
1924	1,036,000
1925	1,500,218
1926	1,915,855
1927	2,137,539

[fol. 134]

Sales in Dollars

1919	$ 707,355.00
1920	2,263,050.00
1921	1,815,702.00
1922	3,475,572.00
1923	4,141,790.00
1924	3,366,376.82

1925	3,953,371.12
1926	4,139,440.13
1927	4,831,583.84

Sales of "Alemite-Zerk" equipment by The Bassick Manufacturing Company have been as follows:

Sales of Zerk Compressors

1925	826,816
1926	1,138,138
1927	1,224,145

Sales of Zerk Fittings

1925	15,910,476
1926	35,976,831
1927	42,072,481

Sales in Dollars and Cents

1924 (May to December)	$ 186,108.95
1925	1,536,381.56
1926	1,870,871.32
1927	2,126,331.29

Nearly all makes of American automobiles and trucks are now equipped and have for several years been equipped at the factory in which they are manufactured with either the Alemite or the Alemite-Zerk lubricating equipment. This includes more than ninety-four per cent of all such makes. There are a few automobiles, notably the Hudson and Essex, which do not use high pressure lubricating equipments of any kind. There are a few makes of automobile, notably the Packard, which use a so-called centralized lubricating system.

One hundred per cent of all American made automobiles and trucks which employ a high pressure lubricating system of any kind are now standardized on either Alemite or Alemite-Zerk equipment. By this I mean that all of these automobiles and trucks are regularly and uniformly equip- [fol. 135] ped at their factories with either Alemite or Alemite-Zerk lubricating equipment. This condition has been true for a considerable period of time.

The Oakland Motor Car Company used the "Dot" equipment on automobiles manufactured by it from about Febru-

ary, 1925, until about June, 1926. The Olds Motor Works installed the "Dot" system on cars manufactured by it from about July, 1925, to about August, 1926. These are the only two automobiles which, in so far as I am aware, (and I make it my business to know and believe that I do know the facts) have ever had the "Dot" system installed upon them as regular factory equipment. A few trucks have also been factory equipped with the "Dot" system but such factory installation of the "Dot" equipment has been discontinued on such trucks and none is now factory equipped with the "Dot" system.

I am confident that less than one per cent of all the automobiles and trucks which have ever been equipped with a high pressure lubricating system of any kind have been equipped with the so-called "Dot" system.

The Bassick Manufacturing Company owns all of the patents covering the so-called "Dot" system. This "Dot" equipment is not sold for the factory equipment of any automobile. The Carr Fastener Company of Boston is licensed by The Bassick Manufacturing Company to sell this "Dot" equipment for industrial use. Its sales for such purposes are extremely limited. By industrial use I mean use in the lubrication of factory machine tools such as lathes, punch presses, etc. Obviously, such machine tools are not carted up to service stations or garages for lubrication.

Samples of the Lubricating Equipment of The Bassick Manufacturing Company

I have marked as Exhibit A, and present herewith, an "Alemite" compressor of a type of which The Bassick Manufacturing Company has sold many thousands. I have marked as Exhibit B, and present herewith, an assortment of straight and elbow "Alemite" pin fittings of which The Bassick Manufacturing Company has manufactured and sold more than two hundred and fifty million.

In making up the combinations embodying the inventions of the Gullborg and Zerk patents aforesaid, The Bassick Manufacturing Company has manufactured and sold compressors of various sizes, but in other respects the lubri- [fol. 136] cating systems have incorporated the essential features of the patents in a manner identical with the specimens of the equipment submitted herewith.

Adaption and Use of the Trade-Marks and Names "Alemite" and "Alemite-Zerk"

When the lubricating equipment hereinabove described as "Alemite" was first put upon the market it was known as the "Alemite" system. The Bassick Manufacturing Company and its predecessors adopted and continuously thereafter used the trade-name and trade-mark "Alemite" in connection with the sale of all lubricating equipment embodying the invention of the aforesaid Gullborg patent. On February 18, 1921, there was filed in the United States Patent Office, in compliance with the Act of February 20, 1905, as amended, and in compliance with the rules of the Patent Office, an application for the registration of said trade-name and trade-mark for lubricants, lubricant dispensers, lubricant compressors, grease guns, flexible conduits for lubricant applying devices, nipples and fittings to be secured to mechanism to be lubricated, and coupling devices for connection with such nipples and fittings for use upon automobiles and other machinery accompanied by the requisite declaration and with a description and drawing representing the said trade-name and trade-mark, and having paid the statutory fee, a certificate of registration based upon the said application, was issued to The Bassick Manufacturing Company on November 22, 1921, as trade-mark registration No. 148,635.

Similarly, an application for registration of the trade-name and trade-mark "Alemite", as applied to lubricants, including oils and greases, was filed in the United States Patent Office in compliance with the Act of February 20, 1905, as amended, on September 19, 1922, and the various requisites having been complied with, a certificate of registration, based on the said application, was issued to The Bassick Manufacturing Company on February 20, 1923, as trade-mark registration No. 164,590.

The Bassick Manufacturing Company acquired all right, title and interest in and to the good-will of the business of its predecessor, in and to the lubricating system hereinabove described, and in and to the trade-name and trade-mark "Alemite".

The Bassick Manufacturing Company has adopted and applied the trade-mark and name "Alemite-Zerk" to equip-
[fol. 137] ment made and sold by it under the aforesaid Zerk patent No. 1,475,980, and in compliance with the Act

of February 20, 1905, filed an application for the registration of said trade-name and trade-mark for lubricating systems including a plurality of fittings to be secured to the mechanism to be lubricated, and a compressor for successively supplying lubricant to said fittings and parts of such systems, accompanied by the requisite declaration and with a description and drawing representing the said trade-name and trade-mark, and having paid the statutory fee, a certificate of registration, based upon said application, was issued to The Bassick Manufacturing Company on October 26, 1926, under No. 219,975.

All of the business hereinabove described has been conducted in conjunction with the use of the trade-names and trade-marks "Alemite" and "Alemite-Zerk". These marks have been applied to the goods sold by The Bassick Manufacturing Company, and hundreds of thousands of dollars have been expended in advertising and displaying the trade-names and trade-marks prominently as describing the said systems of lubrication and its parts.

As a result the lubricating equipment manufactured and sold by The Bassick Manufacturing Company has become known as "Alemite" and "Alemite-Zerk."

The Importance and Value of the Trade-Marks and Names "Alemite" and "Alemite-Zerk"

Due to the care with which these articles are and have been manufactured, selected and prepared, and due to the stability of these articles and products which have come to be known by the trade-names and trade-marks "Alemite" and "Alemite-Zerk", they have come to be favorably known to the trade and particularly to automobile users throughout the United States as articles of quality and dependability. The names "Alemite" and "Alemite-Zerk" now serve the trade and purchasing public as a means of identifying the products of The Bassick Manufacturing Company and to indicate the origin of these goods. The Bassick Manufacturing Company has never abandoned its trade-names or trade-marks and the registrations thereof are now in full force and effect.

The identifying of The Bassick Manufacturing Company's products with the trade-names and trade-marks

"Alemite" and "Alemite-Zerk" by the trade and purchasing public has become one of the Bassick Company's most important and valuable business assets.

[fol. 138] The Plaintiff's Sales and Distributing Organization

The Bassick Company has 48 distributors located in large cities throughout the United States, and each of these distributors has a certain exclusive territory allotted to him by the company. These distributors handle the Bassick Company's entire business with the exception of contracts for regular and standardized equipment with automobile manufacturers and a few of the larger manufacturers of industrial machines for original equipment. This latter business is handled directly by and from the factory office of the Bassick Company. The 48 distributors each employ salesmen who travel throughout their respective territories and make sales of "Alemite" and "Alemite-Zerk" equipment to service stations, garages, hardware stores, automobile accessory dealers, etc.

The Alemite Lubricator Company of Pennsylvania, Inc., referred to in the defendant's depositions, is not an agent for The Bassick Manufacturing Company. It buys Alemite and Alemite-Zerk products from The Bassick Manufacturing Company and sells them within its prescribed territory. In consideration of its being the exclusive distributor of the products of The Bassick Manufacturing Company within its own territory, it is under agreement not to sell these products in the territories of other distributors; otherwise the Alemite Lubricator Company of Pennsylvania has the utmost freedom of action. It collects its own accounts; stands its own loosses, and pockets its own profits.

The Sale of the "Alemite" and the "Alemite-Zerk" Systems is the Sale of Their Component Parts

When the "Alemite" equipment was first put upon the market by a predecessor of The Bassick Manufacturing Company, it was attempted to make up cartons or packages containing complets sets of equipment for each of the many makes of automobiles then on the market and in use. It was shortly found, however, that in order for a dealer to carry a stock adequate to equip any one of a hundred and

fifty different makes of automobiles, he would have to stock one hundred and fifty different kinds of cartons or packages, each containing a compressor, a hose and a coupling, all of which were identical, and an assortment of pin fittings, many of which were identical but differing largely as to the number of fittings in each assortment. This involved tying up a large sum of money in a large stock of goods [fol. 139] which did not have a rapid turnover.

Very shortly, therefore, and before The Bassick Manufacturing Company was organized in 1919, this attempted method of packing and selling "Alemite" equipment was discontinued, and in its stead it became the invariable practice of the Bassick Company to sell stocks comprising so many compressors, so many hose and couplings, and so many fittings of each and every one of the various thread sizes, etc., manufactured by the company. In consonance with this plan, dealers were encouraged to buy so-called display cabinets comprising a large number of small compartments, in each of which a particular size and style of pin fittings was to be placed. In conformity with this plan also, dealers who handled "Alemite" equipment were supplied with so-called "Manuals" published by The Bassick Manufacturing Company, these Manuals containing lists of the sizes and kinds of pin fittings required for the complete equipment of each and every make and model of automobile or truck currently or theretofore manufactured in the United States. When, therefore, a dealer was called upon to supply the equipment necessary for any given make of automobile, as for example, the Hudson, he referred to his "Manual" where he found a list of the styles and kinds of pin fittings required for all of the bearings of the Hudson car. He selected the necessary fittings from his cabinet (or from other receptacles) and delivered the assortment thus made by him to his customer with or without an "Alemite" compressor, hose and coupling, as might be desired by the customer.

The Bassick Manufacturing Company has always priced and sold its compressors separately, it has always priced and sold its couplers separately, and it has always priced and sold the various types and forms of "Alemite" pin fittings and "Alemite-Zerk" fittings separately, leaving it entirely to the dealers to whom these articles have been sold, to make up the necessary assortments, or combina-

tions. This method has enabled dealers greatly to reduce their investment in an adequate and flexible stock and it has greatly increased the dealer's "turn-over" in his investment in the Bassick Company's equipment.

The Bassick Manufacturing Company has expended hundreds of thousands of dollars in supplying tens of thousands of such dealers with sales helps and aids of various kinds. I shall describe and enumerate a few of these ad- [fol. 140] vertising and sales helps with which such dealers have been supplied.

64,000 Equipment Manuals Now in the Hands of Dealers

For the convenience of the many dealers who sell the lubricating equipment of the Bassick Company, a manual has been prepared and published. This "Manual" is a book of 469 pages containing a list of passenger automobiles, trucks, tractors and trailers manufactured in the United States, together with a list of the number, form and price of fittings necessary to equip each such machine with the Alemite System. In connection with each list is given the location at which each form of fitting is to be applied. This "Manual" enables the dealer to select from his display cabinet or elsewhere the number of each form of pin fitting required by his customer for the equipment of any passenger automobile, truck, tractor or trailer listed in the "Manual." At present there are approximately 64,000 copies of this "Manual" in the hands of dealers. The original 10,000 copies of this "Manual" were compiled, edited and printed at a cost of $37,000. The subsequent revised editions have cost the Bassick Company a little more than fifty cents a copy. The cost of 64,000 copies of this "Manual" now in the hands of dealers has been somewhat in excess of $65,000.

At least one copy of this "Manual" has been supplied to every dealer to whom the Bassick Company has supplied a display cabinet as subsequently described and referred to. Many copies also have been supplied to dealers who have preferred to carry their stock of "Alemite" fittings in receptacles other than the Alemite Display Cabinet. I present herewith as Exhibit C a copy of the "Alemite Equipment Manual" herein referred to.

19,700 "Alemite" Display Cabinets

The Bassick Manufacturing Company has supplied to the dealers handling its equipment 19,700 display cabinets of two forms, one an all-steel cabinet and the other a glass-top cabinet. Colored pictures of both styles of cabinet appear on page 79 of a book which the Bassick Company has published under the title "How to Get More Alemite Business" and a copy of which is presented herewith as Exhibit D. These display cabinets have the name "Alemite" prominently displayed upon all four side walls and upon the top and inside of the hinged cover. They are designed and intended to be placed upon a dealer's counter or upon a stand especially designed and intended for the purpose. [fol. 141] Each of the display cabinets contains a large number of small compartments, in each of which may be placed fittings of a given form. Dealers handling the Bassick equipment apparently find these display cabinets a very convenient means of carrying a stock of lubricating equipment, and these cabinets prominently located in a dealer's store apparently attract attention and act as a reminder and inducement to customers to purchase.

85,000 Price List Catalogues

The Bassick Company has also prepared and published and supplied to its dealers a price list of its equipment. This price list contains detailed illustrations of all parts of its lubricating equipment and repair part lists and prices therefor, together also with the standard list price of a complete system for each of the passenger automobiles, trucks, trailers and tractors manufactured in the United States. This price list or catalogue was first published in June, 1922, and up to date more than 85,000 of these catalogue lists were distributed to dealers throughout the United States. The first issue of this list was printed at a cost of $90.00 per thousand copies and some subsequent issues at a cost slightly less than that. Almost every dealer in automobile or allied equipment throughout the United States has been supplied with one or more issues or copies of this price and repair part catalogue. One of these price list catalogues is presented herewith as Exhibit E.

Dealers find it very convenient to refer to this price list to identify repair parts if and when required in connection with "Alemite" equipment, and also to quote the list price

upon such parts. Dealers find it convenient also to take and quote from this price list the cost of complete equipments for passenger cars, trucks, tractors and trailers, the prices given in the list being correct totals of the price of the various forms of pin fittings required for the many bearings of each automobile, together with a compressor, hose and coupling for use in conjunction with co-operation with the fittings.

Advertising Helps

For the past several years The Bassick Manufacturing Company has at great expense advertised its system of lubrication in the "Saturday Evening Post" and other periodicals having large national distribution. This advertising has been valuable not only to The Bassick Manu- [fol. 142] facturing Company, but also to the dealers in this kind of equipment.

In addition to this, the Bassick Company has gone to great expense in having prepared by experts in this line advertising cuts and copy suitable to be published in newspapers, trade catalogues and periodicals. The Bassick Company has at its own expense made thousands of mat and electrotype cuts of these advertisements and has supplied thousands of these cuts without expense to dealers throughout the United States.

In the publication "How to Get More Alemite Business", Exhibit D, are imprints of scores of the advertising cuts in the form of both mat and electrotype. These books have been distributed in large quantities to dealers throughout the country, thus enabling dealers to avail themselves of the free newspaper cut service offered in this book Exhibit D. Thousands of dealers have been furnished with cuts corresponding with the imprints in this book entirely without expense to the dealers and dealers throughout the United States have used these cuts in newspapers, circular catalogue and other advertising. This book also shows one pages 72 to 74, inclusive, half-tone cuts which have been supplied to dealers upon request without expense to them. On pages 75 to 77, inclusive, are imprints of line cuts which have similarly been supplied by the thousands to dealers without expense to them.

Similarly, dealers throughout the country have been supplied with outdoor signs such as illustrated on page 78 of Exhibit D.

Similarly, dealers throughout the country have been supplied gratis with window display material such as illustrated on pages 80, 81 and 82 of this book.

Without going into further detail, The Bassick Manufacturing Company has at its own expense and in many other ways made its lubricating equipment known to the purchasing public and has by such publicity and such sales help and by the merit of the systems created a large demand and sale for the "Alemite" and "Alemite-Zerk" lubricating equipment.

80,000 Services Station Compressors in Use

Even though the "Alemite" and "Alemite-Zerk" lubricating systems embodying the inventions of the Gullborg and Zerk patents have greatly facilitated the work of satisfactorily lubricating automobiles and other machines and have made such work a comparatively quick [fol. 143] and cleanly operation, still experience has shown that a large proportion of automobile owners and drivers prefer not to lubricate their own automobiles but rather to have it done at greasing or other service stations or at public garages. So, also, there are thousands of owners of fleets of automobiles—taxicabs, delivery cars, trucks, etc.,—who maintain their own garages and at which the lubrication of the entire fleet of cars is effected.

Thousands of such fleets of automobiles have been equipped with Alemite pin fittings and Zerk fittings and the equipment of automobiles added from time to time to such fleets has brought about the sale of large quantities of both styles of fittings.

While the operators of many such greasing and service stations and public garages and fleet garages have employed and still continue to employ smaller sizes of "Alemite" compressors as illustrated on page 8 of the booklet "Alemite Products" (Exhibit F) for forcing the lubricant into the bearings equipped with "Alemite" pin fittings, more than 80,000 service compressors, such as shown on pages 11, 12 and 13, have been sold and presumably are now in use, mostly in the hands of public greasing stations and garages and partly in the hands of automobile fleet owners.

Extensive Use of "Alemite" and "Alemite-Zerk" on Machines Other than Automobiles

This use of the "Alemite" and "Alemite-Zerk" systems of lubrication on machinery other than automobiles has been increasing very rapidly during the last few years.

This extensive use of the "Alemite" and "Alemite-Zerk" systems for the lubrication of machines other than automobiles has already developed to a point where more than 539 manufacturers of industrial machinery now apply Bassick fittings to the bearings of their machines as standard original factory equipment. In some instances such manufacturers have supplied "Alemite" and "Alemite-Zerk" compressors and coupling members with their machines. In other instances such manufacturers have depended upon the wide distribution of such compressors and coupling members already in the hands of the public and have not therefore supplied compressors and conduits and coupling members with the machines sold by them and factory equipped with Bassick equipment.

[fol. 144] The "Alemite" System Was a Commercial Pioneer

So far as I am aware, and I believe I know the fact, there was no system or means of lubrication upon the market prior to the entry of The Bassick Manufacturing Company and its predecessor, The Alemite Die Casting & Manufacturing Company, into this field, comprising a plurality of fittings to be secured to the bearings to be lubricated and a compressor having a discharge conduit provided with a coupling for successively making sealed connections and attachments and detachments with and from the various fittings for the purpose of applying lubricant to the bearings.

Alemite Lubricants

The defendant endeavors to establish the proposition that since the Alemite and Alemite-Zerk lubricating apparatus have gone into use on automobiles to the almost complete exclusion of every other kind of lubricating equipment, "that it will be exceedingly difficult for any grease manufacturer other than The Bassick Manufacturing Co. to sell grease to a trade such as the automobile

trade, when said trade, as well as the public at large will be entirely dependent upon The Bassick Manufacturing Co. for all equipment with which it can dispense such grease into the automobile."

The simple facts of the matter are these: The Bassick Manufacturing Company and its predecessor engaged for several years exclusively in the sale of the Alemite lubricating apparatus of the Gullborg patent in suit. Subsequently it engaged in the manufacture and sale of the Alemite-Zerk lubricating equipment of the Zerk patent in suit. In these activities it acquired a valuable good will in the trade-mark and name, "Alemite."

Only recently The Bassick Manufacturing Company began to sell lubricants under the same trade-mark and name "Alemite."

The grease which is injected into bearings by the Alemite and Alemite-Zerk lubricating apparatus is not made an element of any claim of any patent owned by The Bassick Manufacturing Company. The Bassick Company's apparatus has never been sold under any attempted license or restriction confining its purchasers to the use of Alemite or any other particular lubricant.

It is true that the Alemite lubricants of The Bassick Manufacturing Company are of very high quality, and that they are peculiarly well adapted for use in the lubri- [fol. 145] cating apparatus of The Bassick Manufacturing Company. (This is not true of many other lubricants now and heretofore on the market.) The good will which has attached to the lubricating apparatus of The Bassick Manufacturing Company has doubtless facilitated the sale of Alemite lubricants. This, however, is the total sum and substance of the "bogey" of a "grease monopoly" which in the last few months has been so assiduously represented to the trade and to the courts under the leadership of Messrs. Wiedersheim & Fairbanks, counsel for R. M. Hollingshead & Company here, and for the Frank Miller Company.

Statistics indicate that The Bassick Manufacturing Company now sells about 4% of the chassis lubricant and less than 4% of the transmission and gear case lubricants now used in automobiles. We hope, of course, to increase our sales of Alemite lubricants. We never have attempted to control the sale of, or dictate the use of lubricants by any

resort to the protection afforded by the patents in suit. We do not intend to do so. I do not think we could succeed if we tried.

Since we began to sell grease we have, to be sure, advertised it. We pushed its sale to the best of our ability. This has not, however, been done at the expense of our business in lubricating apparatus. We have continued to advertise and push the sales of our lubricating apparatus just as extensively as we have ever done. The volume and profits arising from our sale of apparatus are many times greater than those arising from our sales of lubricants. Our patents have uniformly been construed by the courts as giving us the exclusive right to sell this apparatus. In the sale of grease we are in open competition with all the world.

Irreparable Injury

The sale of the infringing equipment herein complained of not only deprives The Bassick Manufacturing Company of business and profits which would otherwise come to it, but it interferes with and injures the business of The Bassick Company's regularly constituted distributor who alone is authorized to supply the "Alemite" equipment in his territory.

The forty-eight distributors of the Bassick Company, to each of whom is assigned an exclusive territory, are dependent for their livelihood and profits upon the sale of genuine "Alemite" equipment manufactured and sold by The Bassick Manufacturing Company. Except for its sales [fol. 146] directly to the automobile and other machinery manufacturers, the Bassick Company has no outlet for the distribution of its product in the United States except through its distributors who maintain their own business establishments at their own expense. The outlet of the distributors is in turn mainly through hardware stores, automobile accessory stores, service stations and other dealers in like equipment.

Unless the Bassick Company's distributors are protected against infringement of the patents covering the "Alemite" system by hardware dealers, automobile accessory dealers, garages, service stations, etc., the business of the distributors will become unprofitable, and as a result the entire sales and distributing organizations of the Bassick Company will disintegrate and be lost to it.

This organization has been built up only by years of careful selection, adjustment and reorganization and at an enormous expense of time, effort and money.

If the defendant herein is permitted to continue with its infringement of the Bassick Company's patents, it will encourage other dealers similarly to infringe to the great and practically irreparable detriment of The Bassick Manufacturing Company and its sales and distributing organization. Furthermore, the lubricating equipment sold by the defendant herein has to the casual observer or purchaser the appearance of genuine "Alemite" equipment manufactured by The Bassick Manufacturing Company. Its sale and use under the common belief that it is genuine "Alemite" equipment does and will discredit the Bassick Company's product and greatly detract from the reputation and good-will of the Bassick Company.

Title to Patents in Suit

I submit herewith as Exhibit G copies of certain assignments of letters patent in suit, the original executed copies of which I have in my possession and am ready to exhibit to the parties or their counsel upon request, and I am ready to produce them in court if and when required.

The Prior Patent Litigation of The Bassick Manufacturing Company

The patents of The Bassick Manufacturing Company involved in the present case against The R. M. Hollingshead Company have been involved in a large amount of litiga- [fol. 147] tion. For convenience, the opinions and decrees of the courts up to February 23rd, 1928, have been printed and are submitted herewith in three volumes, marked collectively Exhibit H.

On February 28, 1923, The Bassick Manufacturing Company filed a bill of complaint in the United States District Court for the Southern District of Ohio, Western Division, against The Larkin Automotive Parts Company of Dayton, Ohio, charging, among other things, the infringement of Gullborg patent No. 1,307,734. This cause came on for trial at final hearing on July 10, 11 and 12, 1924, before his Honor, Judge Smith Hickenlooper, and on August 1, 1924, an opinion was rendered by the court finding the said Gull-

borg patent valid and infringed as to Claims 1, 2 and 6 thereof. On October 14, 1924, a decree was entered pursuant to the opinion of the court, and upon the same day an injunction was issued and served upon The Larkin Automotive Parts Company pursuant to the decree. The devices complained of and held to be infringements of Gullborg patent No. 1,307,734, in the said Larkin suit, comprised devices like those illustrated in Figures 2, 6 and 10 of the drawing exhibited herewith as Exhibit I.. No appeal from the said decree was taken by either party.

On May 15, 1923, a bill was filed against The O. K. Manufacturing Company et al., of Dayton, Ohio, charging, among other things, infringement of Gullborg patent No. 1,307,734 by the defendants' manufacture and sale of lubricating equipment like that illustrated in Figures 4-A. 8-A. 11, 15 and 19 of the drawing Exhibit I and couplers of the types illustrated in the drawing submitted herewith as Exhibit I' to be used in conjunction with pin fittings. This cause came on to be heard before his Honor, Judge Smith Hickenlooper, on December 1 and 3, 1925, in the United States District Court at Dayton, Ohio, and in due course an option was rendered finding the said devices to be infringements of the said Gullborg patent, and pursuant to the said opinion a decree was entered on March 9, 1925. The Bassick Manufacturing Company took an appeal from so much of said decree as related to the defendants' alleged right to sell the component parts of the lubricating equipment involved for so-called repair and replacement purposes, and The O. K. Manufacturing Company et al, took an appeal with respect to the finding of validity and infringement of the Gullborg patent and the Winkley reissue patent No. 14,667 which was also involved.

[fol. 148] On November 12, 1923, The Bassick Manufacturing Company filed a suit against The Lyman Manufacturing Company et al., and on August 25, 1924, a suit was commenced against The Peerless Automatic Machine Company in the United States District Court for the Northern District of Ohio, Eastern Division, at Cleveland, Ohio. The Lyman et al., and Peerles cases based in part on Gullborg patent No. 1,307,734 and Winkley reissue patent No. 14,667, were heard simultaneously by his Honor, Judge Westenhaver, on December 22 and 23, 1924, and on February 7, 1925, an opinion was rendered by the court granting an in-

junction and an accounting against both defendants as to Gullborg patent No. 1,307,734 and finding the Winkley reissue patent not infringed. Among the devices involved in the said Lyman and Peerless cases were the compressors, couplers and pin fittings illustrated in Figures 3, 7 and 14, respectively, of the accompanying drawing Exhibit I. The Lyman Manufacturing Company et al. and The Peerless Automatic Machine Company took appeals from the decrees entered pursuant to the opinion on March 4, 1925, with respect to the holding of infringement as to Gullborg patent No. 1,307,734, and The Bassick Manufacturing Company took cross-appeals with respect to the finding of non-infringement of Winkley reissue patent No. 14,667.

On February 3, 1925, the Bassick Manufacturing Company filed bills of complaint in the United States District Court for the Northern District of Ohio, Eastern Division, at Cleveland, Ohio, against Wag's Accessories Company and The Riggs Tire & Supply Company, Incorporated, both of Cleveland, Ohio. The said Wag's and Riggs cases based on Gullborg patent 1,307,734 were tried on May 20, 1925, before Judge Westenhaver, and in due course an opinion was rendered and decrees entered dismissing the bills of complaint. The Bassick Manufacturing Company took appeals from the decrees of dismissal in both cases.

In October, 1925, The Larkin Automotive Parts Company referred to herein, conceiving itself aggrieved by The Bassick Manufacturing Company's bringing of suits against customers of the said Larkin Company, brought a motion to restrain the bringing of further suits, and for an injunction restraining certain other acts of The Bassick Manufacturing Company, which motion was allowed and an injunction was issued, as by the record in the said case will more fully and at large appear. The Bassick Manu- [fol. 149] facturing Company took an appeal from the said order, which was dated October 26, 1925.

In July, 1926, The Larkin Automotive Parts Company appeared by its counsel before his Honor, Judge Smith Hickenlooper, in the United States District Court for the Southern District of Ohio, at Cincinnati, Ohio, and moved for the entry of a decree modifying the decree theretofore entered in the said suit of Bassick vs. Larkin, and pursuant to the said motion an entry was made on July 24, 1926, granting the said defendant the right to sell the

component parts of the lubricating equipment for repair and replacement purposes. The Bassick Manufacturing Company took an appeal from said entry.

In due course, to-wit, on March 18, 1927, the United States Circuit Court of Appeals for the Sixth Circuit at Cincinnati, having heard all of the aforesaid appeals in the Larkin, O. K., Lyman, Peerless, Wag's and Riggs cases, rendered an opinion and entered decrees, a copy of the said opinion and the decrees entered pursuant thereto being contained in Vol. III of the Adjudication Book Exhibit H.

On April 16th and May 3rd, 1927, The O. K. Manufacturing Company and The Larkin Automotive Parts Company filed their petition for a rehearing and supplemental petition for rehearing in the United States Circuit Court of Appeals for the Sixth Circuit, as shown more fully by the accompanying copies marked Exhibits J and K. Thereafter to-wit on May 13, 1927, the Circuit Court of Appeals for the Sixth Circuit filed an opinion and entered an order denying the petition for rehearing, as more fully shown by the printed copy thereof appearing at page 463 of Volume 3 of the Adjudication Book submitted herewith as Exhibit H.

Thereafter, to-wit: On August 12, 1927 The Larkin Automotive Parts Company and The O. K. Manufacturing Company filed their petition for certiorari in the United States Supreme Court, as more fully shown by the copy thereof submitted herewith as Exhibit L; and in due course, to-wit: on October 31, 1927, the said Court entered an order denying the petition, as shown by the copy of the order reproduced at page 461 of Volume 3 of the Adjudication Book identified as Exhibit H.

Thereafter, to-wit: On or about December 13, 1927, upon application to the United States District Court for the Southern District of Ohio, Western Division, a decree was entered in the suit of The Bassick Manufacturing Company against The O. K. Manufacturing Company and A. C. Jones, Jr., Receiver for The O. K. Manufacturing Com-
[fol. 150] pany pursuant to the mandate of the Court of Appeals for the Sixth Circuit. A copy of the decree entered by the Court is reproduced at page 532 of Volume 3 of the Adjudication Book submitted herewith as Exhibit H.

On September 17, 1925, The Bassick Manufacturing Company filed a bill of complaint in the United States District Court for the Northern District of Illinois, Eastern Division, at Chicago, Illinois, agaist Montgomery Ward & Co., Incorporated, charging infringement of Gullborg patent No. 1,307,734, and thereafter The Larkin Automottive Parts Company, of Dayton, Ohio, filed a petition to intervene which was allowed on January 6, 1926, and pursuant to the order allowing intervention The Larkin Automotive Parts Company became a party defendant to the said suit. The case came on for final hearing before his Honor Judge Walter. C. Lindley upon Gullborg patents Nos. 1,307,733 and 1,307,734, and Zerk patent No. 1,475,980, on April 8, 9 and 10, 1926, and thereafter, to-wit on June 19, 1926, the court rendered an opinion finding the said Gullborg and Zerk patents valid and infringed by the defendants by their manufacture and sale of certain equipment, comprising among other things, the lubricating equipment like the coupler, compressor, and pin fitting of the type illustrated in the drawing which is submitted herewith as Exhibit M, which is a copy of Plaintiff's Exhibit No. 141 in said suit. An appeal was allowed The Larkin Automotive Parts Company and Montgomery Ward & Co., Incorporated, from the decree entered by Judge Lindley pursuant to his opinion, and on April 25, 1927, the United States Circuit Court of Appeals for the Seventh Circuit rendered its opinion affirming the decree entered in the District Court. A copy of the opinion of the Circuit Court of Appeals for the Seventh Circuit in said case and the decree of the District Court reviewed therby is contained in Volume III of the Adjudication Book Exhibit H. A photostat copy of Plaintiff's Exhibit 154 in said suit is submitted herewith as Exhibit N, the same being the catalogue of The Larkin Automotive Parts Company referred to in the decree.

Subsequent to the entry of the decree by Judge Lindley in the District Court on July 9, 1926, The Larkin Automotive Parts Company continued the manufacture and sale of the lubricating equipment enjoined in the said decree, and a contempt proceeding was instituted, as a result of which The Larkin Automotive Parts Company was fined $2,000.00, one-half for the use of the United States and one-half for the use of The Bassick Manufacturing Com-

[fol. 151] pany as more fully shown by the copy of the memorandum of the court filed on July 27, 1926, as found on page 254 of Volume 2 of the Adjudication Book submitted as Exhibit H.

On May 24, 1927, The Bassick Manufacturing Company filed a motion for a preliminary injunction to restrain The Larkin Automotive Parts Company from manufacturing, using or selling certain modified forms of lubricating equipment which were sold by The Larkin Automotive Parts Company subsequent to the decree of the District Court dated July 9, 1927. Pursuant to the motion the Court entered an order for a preliminary injunction on May 27, 1927 as shown by the copy of the order appearing at page 749 Volume 3 of the Adjudication Book Exhibit H. I submit herewith as Exhibit 0^1 the 1927 catalogue of The Larkin Automotive Parts Company and as Exhibit 0^2 the miniature Larkin-Thuro catalogue referred to in the said order. I submit herewith as Exhibit 0^3 and 0^4 respectively drawings illustrating the couplers identified as Exhibits U and V of the affidavit of Albin C. Ahlberg referred to in the said order of May 27, 1927. I also submit herewith as Exhibit 0^5 the lubricant compressor and coupler of The Larkin Automotive Parts Company referred to as Exhibit G of the affidavit of A. J. Sawitoski. I submit herewith as Exhibit 0^6 drawing of the coupler submitted by Mr. Sawitoski with this affidavit as referred to in the said order.

Thereafter, to-wit: On or about October 27, 1927, an order was entered to show cause why a preliminary injunction should not issue against The Larkin Automotive Parts Company to restrain the manufacture and sale of still other modified equipment, and pursuant to plaintiff's motion for a preliminary injunction an opinion was rendered and a decree or injunctional order was entered by the Court on December 5, 1927, as shown at page 745 of the Adjudication Book Exhibit H. I submit herewith as Exhibit P a photographic copy of the 1927 catalogue of The Larkin Aufomotive Parts Company and as Exhibit P^1 one of The Larkin Company's lubricant compressor and coupler complained of and referred to in the said order. The evidence before the Court upon the motion for preliminary injunction showed that The Larkin Automotive Parts Company sold an adapter for use with its equip-

ment to make possible with the use of the Alemite lubricating equipment of The Bassick Manufacturing Company the servicing of machines equipped with Alemite pin fittings.

[fol. 152] On or about April 29, 1926, The Bassick Manufacturing Company filed a bill of complaint based upon Gullborg patents numbers 1,307,733 and 1,307,734. against A. E. Faught and H. J. Windmiller, doing business as Motor Parts Station at Fort Worth, Texas. Thereafter, to-wit: on April 8, 1927, this cause came on to be heard at final hearing before his Honor, Judge James C. Wilson, sitting in the United States District Court for the Northern District of Texas, Fort Worth Division, and after hearing the testimony of witnesses called by both parties, and considering the oral arguments and briefs of counsel, the Court entered a decree, a copy of which is found at page 588 Volume III of the Adjudication Book Exhibit H. The devices complained of in that suit and referred to in the decree, comprised pin fittings of the types illustrated in figures 13 and 17 of the drawing submitted herewith as Exhibit I, and lubricant compressors and couplers of the type illustrated in the drawing Exhibit M submitted herewith. That suit also involved the defendant's sale of lubricant compressors and couplers of the type illustrated in the drawing submitted herewith and marked Exhibit Q. The decree in that case has not been modified and is in full force and effect.

On November 20, 1924, The Bassick Manufacturing Company filed a bill of complaint against John Staff, et al., doing business as Staff Brothers Company, charging infringement of Gullborg Patents Numbers 1,307,733 and 1,307,734. The equipment sold by the defendants and complained of in that suit, comprised pin fittings of the type illustrated in figures 11 and 19 of the Exhibit I drawing; and compressors and couplers of the types illustrated in figures 4 and 8 respectively of the Exhibit I drawing. The case came on for final hearing before his Honor, Judge Henry W. Goddard, sitting in the United States District Court for the Southern District of New York upon the testimony of witnesses called by both parties, and the Court, after consideration of the oral arguments and briefs filed by plaintiff and defendant, entered an opinion and en-

tered a decree, as found on pages 256 and 277 of Volume II of the Adjudication Book submitted herewith as Exhibit H.

On January 12, 1927, The Bassick Manufacturing Company filed in the United States District Court for the Eastern District of New York a bill of complaint against The Ready Auto Supply Co., Inc., charging infringement of Gullborg Patents Numbers 1,307,733 and 1,307,734, and Zerk Patent Number 1,475,980, by the defendant's sale of [fol. 153] lubricant compressors of the type illustrated in the drawing submitted herewith as Exhibit Q, and pin fittings of the type illustrated in the same drawing, and pin fittings of the type illustrated in figure 13 of the drawing submitted herewith as Exhibit I. The suit was also based upon the defendant's sale of a Zerk type connector, which comprised a short piece of pipe and a connector member having a depression to co-act with Zerk type fittings of the type illustrated on page 10 of the catalogue of The Larkin Automotive Parts Company submitted herewith as part of Exhibit N, which fittings were also sold by the defendant. The case came on for final hearing before his Honor, Judge Marcus B. Campbell and was tried at final hearing upon the testimony of witnesses called by both parties, and after consideration thereof and briefs filed by both sides, the Court rendered an opinion and subsequently entered a decree on December 30, 1927. The opinion and decree are reproduced on pages 398 and 553 respectively of Volume 3 of the Adjudication Book submitted as Exhibit H.

On November 7, 1927, a contempt proceeding instituted by The Bassick Manufacturing Company in the United District Court for the Southern District of Ohio, Western Division, in the suit against The O. K. Manufacturing Company and A. C. Jones, Jr., Receiver for The O. K. Manufacturing Company, came on for hearing before his Honor, Judge Smith Hickenlooper. This contempt proceeding was based upon the continued sale by A. C. Jones, Jr., of pin fittings of the type illustrated in figure 19 of the drawing submitted as Exhibit I, and upon the conclusion of the hearing the Court rendered an opinion as shown by the copy thereof which appears at page 451 of Volume 3 of the Adjudication Book submitted herewith as Exhibit H.

On or about April 6, 1926, The Bassick Manufacturing Company filed a bill of complaint in the United States District Court for the Eastern District of Michigan, Southern Division, against Richard D. Maher, charging infringement of Gullborg Patents Numbers 1,307,733 and 1,307,734 and Zerk Patent Number 1,475,980. In due course thereafter an order for a preliminary injunction was entered enjoining and restraining the defendant from the further infringement of the said patents. Thereafter the cause came on for hearing before his Honor, Judge Arthur D. Tuttle, sitting in the United States District Court at Detroit, upon an order to show cause why the said defendant [fol. 154] should not be punished for contempt for violating the injunction in connection with the sale of pin fittings. The contempt matter was heard on January 30th, 31st and February 1st, 1928 and on the latter day Judge Tuttle rendered an opinion as shown at page 456 of Volume 3 of the Adjudication Book submitted as Exhibit H.

The lubricating equipment sold by The R. M. Hollingshead Company and complained of in this suit is identified in the affidavits of D. A. Beezley and O. A. Cumming and the devices are further described and illustrated in the affidavit of Ernest W. Davis, the said affidavits having been filed by The Bassick Manufacturing Company in support of its motion for a preliminary injunction in this cause.

Prior Art

The defendants in the hereinbefore described suit between The Bassick Manufacturing Company and Montgomery Ward & Co., Inc., and The Larkin Automotive Parts Company, established the use of certain lubricating apparatus made and sold by the White Motor Company of Cleveland, Ohio. The defendants introduced in evidence a grease ejector identical with that shown in the accompanying photoprint, Exhibit AA, and also a blue print showing the automobile shackle bolt with which this grease ejector was used. This shackle bolt is illustrated in Figure 1 of the accompanying photoprint, Exhibit BB, and has a tapered inlet which is normally closed against dirt by a removable plug.

In said suit the witnesses, Frank L. Brown and Samuel Blakeney, employes of the White Motor Company, testified that the end of the discharge tube of the ejector

is spherical and that the inlet part of the shackle bolt, which is adapted to receive this spherical end, is conical and flares outwardly at an angle of 45 degrees. Figure 2 illustrates the position of these parts during the lubricating operation and is a cross-sectional view of the grease ejector and the shackle bolt, showing the plug of the shackle bolt removed and the spherical end of the grease ejector applied to the tapered inlet of the shackle bolt. The witnesses Brown and Blakeney further testified that this apparatus was standard equipment on automobiles manufactured and sold by the White Motor Company over a period beginning prior to 1909 and lasting until the advent of the Alemite system when this apparatus was discarded in favor of the Alemite system.

[fol. 155] The White prior use was before both the District Court and Circuit Court of Appeals in said suit and both courts held that this White lubricating apparatus did not anticipate the Zerk invention.

Prior Art Introduced in Evidence by the Defendant Herein

The defendant has introduced in evidence twenty-one patents and one prior art publication. One of these patents is the Gullborg patent in issue and another of these patents is the Zerk patent in issue.

Of the nineteen remaining patents, thirteen were in evidence before the Sixth or Seventh Circuit Courts of Appeal, or both, another was set up in an answer in a suit decided by each of said Circuit Courts of Appeal, and still another was cited in a Patent Office rejection which formed part of the Zerk file wrapper introduced in evidence in a suit which was finally decided by the Seventh Circuit Court of Appeals.

Four patents have never been before either of said Circuit Courts of Appeal. One of these four patents is the United States patent to Seng No. 1,322,357 and corresponds to the British and French patents to Seng which were in evidence before both of said Circuit Courts of Appeal. Another of these four patents is the patent to Murphy No. 1,637,326 and is too late to be a reference. The two remaining patents are Hay, et al., No. 499,541 and Crotty No. 1,400,871.

The Hay, et al., patent relates to a centralized lubricating system rigidly and permanently secured to a large

vertical type steam engine such as is used in pumping stations and ships and the contact coupling forming one of the elements of this system is not intended to be used independently of the rest of the system. Furthermore, this coupling is no better than the White prior use which has been considered by a Court of Appeals.

The Crotty patent discloses a valved oil nipple for vehicle wheels. This nipple is intended to be supplied with oil under atmospheric pressure by means of an ordinary oil can and this patent is, therefore, not an anticipation of a pressure lubricating system.

The following chart graphically shows the patents which have been considered by one or both Circuit Courts of Appeal:

[fol. 156] List of Patents Introduced by Defendant and Courts of Appeal which Considered these Patents

14,667, Winkley, Reissue, Evidence 6th and 7th C. C. A.
16,787, Wallace, Reissue, Evidence 7th C. C. A.
242, 141, Laskey and Arnold, Evidence 6th C. C. A.
242,564, Sholder, Evidence 6th and 7th C. C. A.
456,295, Stedham, Evidence 6th C. C. A.
499,541, Hay and McIntyre, ——, ——.
610,359, Lees, Evidence 7th C. C. A. (Answer 6th).
1,117,762, Barcus, Evidence 6th and 7th C. C. A.
1,201,414, Winkley, Evidence 6th and 7th C. C. A.
1,307,733, Gullborg, Evidence 6th and 7th C. C. A.
1,322,357, Seng, (same as French and British patents).
1,400,871, Crotty, —— ——.
1,459,662, Manzel (cited in Zerk application file in evidence in 7th C. C. A.).
1,494,652, Wallace, Evidence 7th C. C. A.
1,637,326, Murphy (too late).

British

6,940, Clarkson, Answer 6th and 7th C. C. A.
3,028, Seng, Evidence 6th and 7th C. C. A.
21,893, Alley, Evidence 6th and 7the C. C. A.

French

20,083, Seng, Evidence 6th C. C. A.
468,869, Seng, Evidence 6th C. C. A.

The publication introduced in evidence is page 258 of the French magazine "Omnia" and illustrated the coupler and nipple of the Seng patents connected to a screw type grease gun by means of a flexible hose. This is no better than the Winkley patent No. 1,201,414 which was in evidence before both the Sixth and Seventh Circuit Courts of Appeal and as a disclosure of Gullborg's coupler structure it adds nothing to the Seng patents which have also been considered by both Circuit Courts of Appeal.

Williams, Bradbury, McCaleb & Hinkle, Solicitors and Counsel for Plaintiff.

Defendant's counsel stipulates and agrees that the foregoing statement of Mr. J. E. Otis, Jr., may be taken and read in evidence at the trial with the same force and effect as if taken in the regular way, under R. S. 863, defendant's counsel, however, reserving the right to object to the same and now objects thereto, on the ground it is incompetent, irrelevant and immaterial, being in part hearsay, and not germane to the issues herein.

Leonard L. Kalish, E. Hayward Fairbanks, Solicitors and Counsel for Defendant.

[fols. 157 & 158] [File endorsement omitted.]

(Here follow photolithographs of side folios 159 and 160.)

FIG. 1.

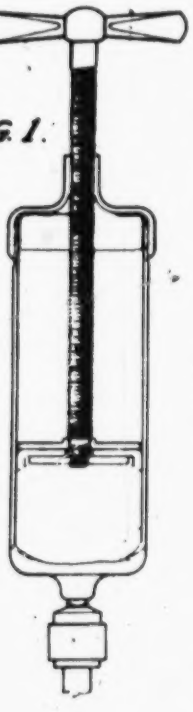


FIG. 2.

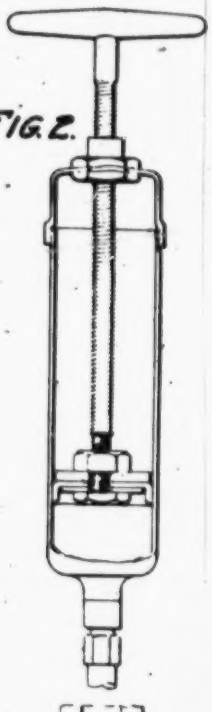


FIG. 3

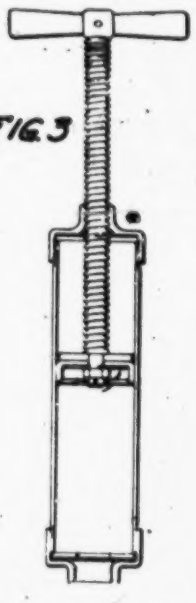


FIG. 4

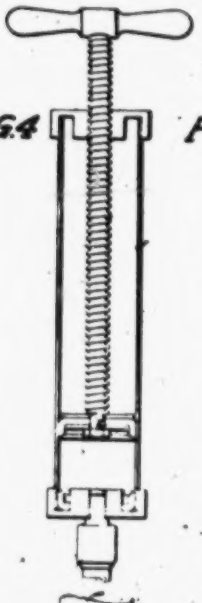


FIG. 4A

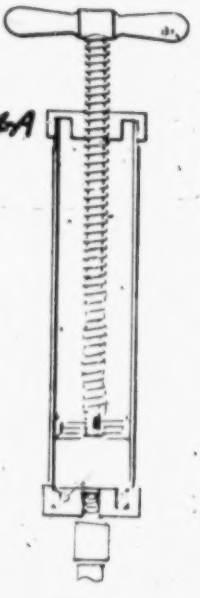
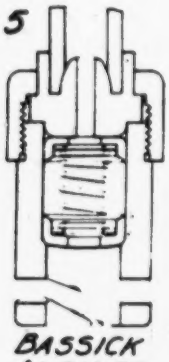
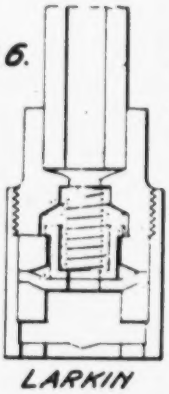


FIG. 5



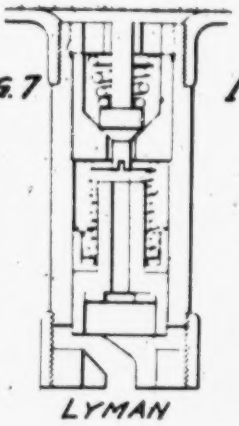
BASSICK ALEMITE

FIG. 6.



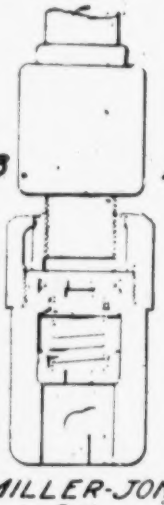
LARKIN

FIG. 7



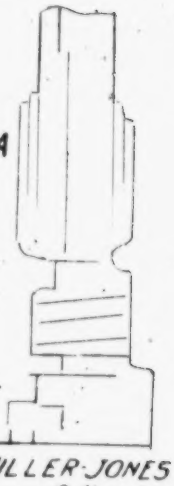
LYMAN

FIG. 8



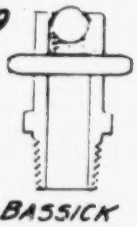
MILLER-JONES O K

FIG. 8-A



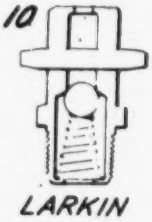
MILLER-JONES O K

FIG. 9



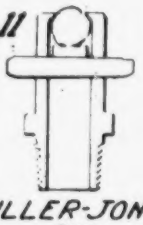
BASSICK ALEMITE

FIG. 10



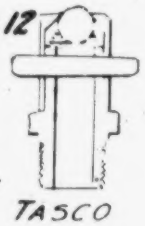
LARKIN

FIG. 11



MILLER-JONES O K

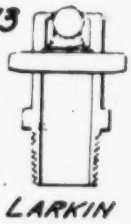
FIG. 12



TASCO

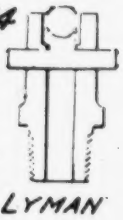
PLAINTIFF'S EXHIBIT · I

FIG. 13



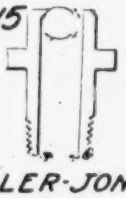
LARKIN

FIG. 14



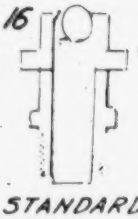
LYMAN

FIG. 15



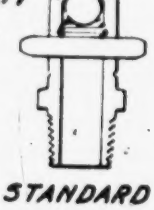
MILLER-JONES O K

FIG. 16



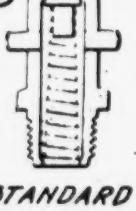
STANDARD PRODUCTS

FIG. 17



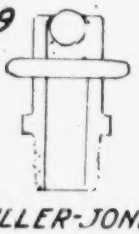
STANDARD PRODUCTS

FIG. 18



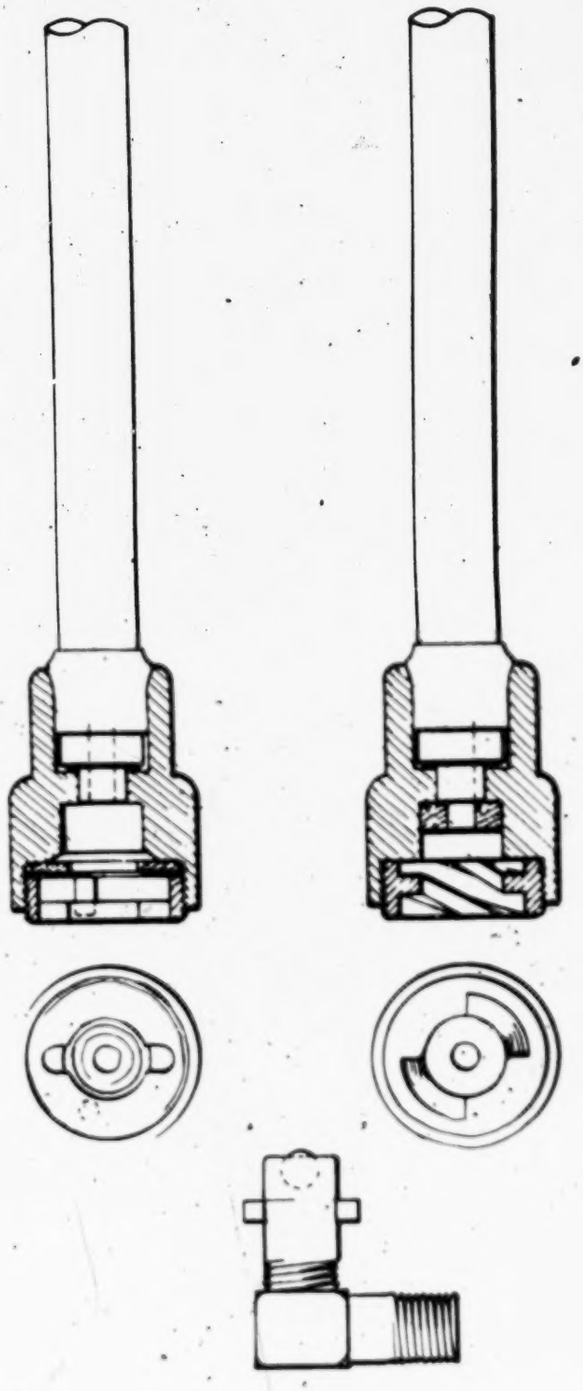
STANDARD PRODUCTS

FIG. 19



MILLER-JONES O.K

PLAINTIFF'S EXHIBIT I



PLAINTIFF'S EXHIBIT I

[fol. 161] EXHIBIT J—STIPULATED OTIS TESTIMONY

(Cover)

UNITED STATES CIRCUIT COURT OF APPEALS, SIXTH CIRCUIT

Nos. 4571-2

BASSICK MANUFACTURING Co., Appellant and Appellee,

v.

THE O. K. MANUFACTURING Co., Appellee and Appellant

Nos. 4601-4766

BASSICK MANUFACTURING Co., Appellant,

v.

THE LARKIN AUTOMOTIVE PARTS Co., Appellee

Petition for Rehearing—Filed Apr. 16, 1927

Arthur B. Mussman, Clerk. Allen & Allen, of Counsel for the O. K. Mfg. Co. and The Larkin Automotive Parts Co.

[fol. 162] IN THE UNITED STATES CIRCUIT OF APPEALS, SIXTH CIRCUIT

Nos. 4571-2

BASSICK MANUFACTURING Co., Appellant and Appellee,

v.

THE O. K. MANUFACTURING Co., Appellee and Appellant

Nos. 4601-4766

BASSICK MANUFACTURING Co., Appellant,

v.

THE LARKIN AUTOMOTIVE PARTS Co., Appellee

PETITION FOR REHEARING

Your petitioners, the O. K. Manufacturing Co. and the Larkin Automotive Parts Co., defendant-appellees in the above cause, respectfully petition your Honorable Court for

a rehearing of the appeal that your petitioners may show the Court, as it believes it can do, that, on the record the Court should find that your petitioners have the right, without infringement or contributory infringement, to sell service grease guns or compressors without hose and coupler attachments to garages which are adapted for use in supplying lubricant to automobiles equipped by the complainant with alemite fittings and alemite couplers which are free from the monopoly of the patents in suit and that claims 14 and 15 of Gullborg patent No. 1307734, are void for double patenting in view of Gullborg patent No. 1307733. (Larkin Rec., vol. 4, p. 332.)

As grounds for this petition your petitioners say:

1. The Court has apparently considered, in sustaining the 12th claim of Winkley, that this claim called for a grease compressor in the combination, whereas in fact the claim does not include the grease gun.

The claim calls for a combination of:

(a) A lubricant receptacle (the hollow spindle 27).

(b) A conduit 8.

(c) Means 36 for detachably securing the conduit to the receptacle, the claw form of attachment.

[fol. 163] (d) A perforated member 37 yieldably mounted in the conduit, and

(e) A spring 46 for yieldingly holding the member 37 in contact with the hollow spindle.

The phrase "means for supplying lubricant to the hollow receptacle" does not refer to the pump, but as the claim plainly defines the structure, this "means" consists in or comprises the conduit with the other devices specified.

Now when we come to the claims of Gullborg, the element of a pump is incorporated in the claims. In claim 12 of Gullborg the element is defined as "means for supplying lubricant to said hollow member under pressure."

The difference between the Winkley claim 12 which omits the grease compressor and the Gullborg claim 12 which includes the grease compressor is manifest on a comparison of the two claims which, as the file wrappers disclose, were each presented by the same solicitors.

Claim 12 of Gullborg calls for the combination:

(a) A bearing.

(b) A hollow member.

(c) Means for supplying lubricant to said hollow member—the grease compressor.

(d) Means for detachably connecting said members.

(e) Means for sealing the connector, comprising:

(f) A gasket, positioned between the members held against one of the members by the pressure of the lubricant.

(g) A spring for initially positioning the gasket.

The element (c) of this claim is not found in Winkley. We believe that the Court was misled by the similarity of the phrase "means for supplying lubricant to said hollow member" in both Winkley and Gullborg, but that an analysis of the Winkley claim will demonstrate that the phrase in Winkley relates only to the conduit and other details as this "means."

The use of the word "comprising" in claims is quite common, and it means rought "consisting in part of." What Winkley has set forth as his invention in claim 12 is a means for filling a bearing with grease under pressure, which consists at least in part of a hose and coupling having the spring pressed and apertured valve. By omitting the compressor itself, he has certainly failed to include it in his combination, and confined his invention to what it really was, viz: the elements making the quick, detachable coupling for applying lubricant to automobiles.

The fact that the grease compressor is omitted as an [fol. 164] element in claim 12 is further evidenced by the fact that of the group of claims 8-17 added in the re-issue to the original claims 1-18, the grease compressor is made an element of claims 9, 11, 16 and 17 by the final phrase substantially the same in each claim: "means for supplying lubricant under pressure to the other end of said conduit", while this element is omitted from the combination of claims 12, 13, 14 and 15.

Claim 12 was the only claim relied upon by the plaintiff because claims 9, 10, 11, 16 and 17 are obviously too broad and are met in the Alley and Seng British patents.

If counsel's analysis of the 12th claim of Wingley is correct, there can be no infringement of the claim in manufacturing and selling grease guns without hose and coupler attachments.

So far as the Winkley patent is concerned, the invention is confined to the combination of coupler and pin fitting, and the issue of contributory infringement by the manufacture and sale of grease guns disappears from the controversy.

The Court has held the 12th claim of Gullborg invalid because of the showing in Winkley, so that the public is free to manufacture and sell the combination of that claim so far as the construction does not infringe the claim of the Winkley patent. This finding would apparently permit the manufacture and sale of the combination of grease compressor, hose, hose coupling and bayonet slot connection for the coupling member to the machine bearing provided the broad, pioneer features covered by the 12th claim of Winkley were not infringed and the issue of "repairs and replacement" is merely academic.

2. We submit that the Court should not have sustained claims 14 and 15 of the Gullborg patent No. 1307734 in view of the prior patent to Gullborg, No. 1307733.

The only difference between claims 14 and 15 of Gullborg No. 1307734 and claims 3, 4 and 5 of Gullborg No. 1307733 is that in No. 1307734 the specific type of pin fitting of the earlier patent is claimed in combination with a grease pump and a coupling for attaching the grease pump to the pin fitting.

The grease gun and means for attaching it to the pin fitting is described in the prior patent, No. 1307733, but is not claimed.

This condition would apparently bring the case directly within the doctrine of Underwood v. Garber, 149 U. S. 234, where two patents, Nos. 348702 and 348703, were issued on [fol. 165] the same day, the earlier numbered patent being for a composition to be applied to paper and the later numbered patent being for the application of the composition to the paper.

Suit was brought on patent No. 348703 and the Court held there was no invention in the use of the specific composition and that the second patent was invalid.

In the instant case, inasmuch as it was admittedly old to employ a grease gun with hose coupler connection for a pin fitting, there could be no invention in the combination of the specific type of pin fitting with any grease gun and hose coupling.

Two valid patents for the same invention can not be granted either to the same or a different party. Miller v. Eagle, 151 U. S. 186.

"The claim of a specific device or combination and an an omission to claim other devices or combinations apparent in the face of the patent are in law a dedication to the public of that which is not claimed."

Miller v. Brass Co., 104 U. S. 350.

If Gullborg was entitled to the combination of claims 15 and 15, these claims should have been included in patent No. 1307733, inasmuch as the combination was fully disclosed in said patent.

The matters to which we have referred were not discussed in the briefs or oral argument of counsel.

Accordingly a rehearing and a stay of the mandate are prayed.

Respectfully submitted, Allen & Allen, of Counsel for the O. K. Mfg. Co. and The Larkin Automotive Parts Co.

We hereby certify that we have examined the foregoing petition for rehearing and in our opinion the petition is well founded in point of fact and law and it is not interposed for the purpose of delay.

Allen & Allen, Counsel for the O. K. Mfg. Co. and The Larkin Automotive Parts Co.

[fol. 166] EXHIBIT K—STIPULATED OTIS TESTIMONY

(Cover)

UNITED STATES CIRCUIT COURT OF APPEALS, SIXTH CIRCUIT

Nos. 4571-2

BASSICK MANUFACTURING Co., Appellant and Appellee,

v.

THE O. K. MANUFACTURING Co., Appellee and Appellant

Nos. 4601-4766

BASSICK MANUFACTURING Co., Appellant,

v.

THE LARKIN AUTOMOTIVE PARTS Co., Appellee

SUPPLEMENT TO THE PETITION FOR REHEARING—Filed May 3, 1927

Arthur B. Mussman, Clerk. Allen & Allen, of Counsel for the O. K. Mfg. Co. and The Larkin Automotive Parts Co.

[fol. 167] UNITED STATES CIRCUIT COURT OF APPEALS, SIXTH CIRCUIT

Nos. 4571-2

BASSICK MANUFACTURING Co., Appellant and Appellee,

v.

THE O. K. MANUFACTURING Co., Appellee and Appellant

Nos. 4601-4766

BASSICK MANUFACTURING Co., Appellant,

v.

THE LARKIN AUTOMOTIVE PARTS Co., Appellee

SUPPLEMENT TO THE PETITION FOR REHEARING

Since the filing of the petition for rehearing in the instant case, the Court of Appeals of the Seventh Circuit

has, on April 25th, rendered its opinion in a cause pending in the Seventh Circuit between The Bassick Manufacturing Company v. The Larkin Automotive Parts Company, No. 3823.

In this suit the two Gullborg patents 1307733 and 1307734 were in issue. The claims relied on and considered by the Court of Appeals were claims 3, 4 and 5 of Gullborg patent 1307733, and claims 1, 2 and 6 of Gullborg patent 1307734.

Claims 14 and 15 of the later numbered patent 1307734 were not considered by the Court of Appeals of the Seventh Circuit.

A copy of the decision of the Seventh Circuit is hereto attached.

From its opinion it will be noted that the Court in the Seventh Circuit considered that it ought to be governed by the prior decision of this Court, and it had this to say concerning Gullborg patent 1307733:

"This patent likewise was involved in both of the decisions cited above. No contention is made, however, that the Ohio decision is binding here for the parties are not the same.

This patent, however, has been before many District Courts and has been uniformly sustained. Its validity has been assailed in some twenty different suits. In each in- [fol. 168] stance, the attack failed. It has been so construed as to permit of a liberal equivalency of its novel element. In fact, in the Sixth Circuit Court decision, one of the infringing devices was similar to the device manufactured by appellant.

Appellant frankly concedes that on the issue of validity the question is one involving invention. In other words did the introduction of the novel element in the combination evidence mechanical skill or inventive genius?

In view of the discussion of these patents in the opinions referred to, nothing will be accomplished by an elaboration of our views. We conclude that claims three, four and five of this patent are valid and infringed."

The result of the two decisions of this Circuit and the Seventh Circuit is that in suits between the same parties, a patent on the pin fitting alone has been sustained, and also a patent on the use of the pin fitting in the only way it can be used, that is, with any construction of compressor

and coupling. The situation in the instant case seems exactly parallel with the situation in Underwood v. Gerber, 149 U. S. 224.

In that case the patent in suit 348073 claimed

"A sheet of material or fabric coated with a composition composed of a precipitate of dye matter in combination with oil, wax or oleaginous matter."

The other patent, 348072, claimed

"A composition composed of a precipitate of dye matter in combination with oil, wax or oleaginous matter."

The Supreme Court held that the composition called for in 347073 as coated on fabric was already known and described in patent 348072.

In the lower court leave was given the complainant to amend its bill alleging ownership and infringement of patent 348072. This the plaintiff failed to do, and the bill was dismissed.

The Supreme Court held the decree of the lower court must be affirmed saying: "There was no patentable novelty or invention in view of earlier patents and publications in applying an existing coloring substance to paper."

The Court further held that inasmuch as the composi-
[fol. 169] tion was not claimed in 348073, the claim actually made operated in law as a disclaimer of what was not claimed, and that there was no invention in applying it to the paper as claimed in patent 348073.

Applying the principle of this case to the instant case, The Bassick Company sued on patent 1307733 in the Chicago district, and did not count on claims 14 and 15 of 1307734, while in this district they did not sue on patent 1307733 but did count on claims 14 and 15 of 1307734.

This Court, not having its attention called to the claims of patent 1307733 on the pin fitting, we think, inadvertently sustained claims 14 and 15, when they should have held that the specific pin fitting construction was old as shown in patent 1307733, and that so far as claims 14 and 15 of 1307734 were concerned, the specific pin fitting must be regarded as disclaimed, and as being public property, and this Court should have held that there was no invention in combining this old pin fitting with a grease pump having a discharge conduit and means co-acting with the ends of the pin for

detachably connecting the discharge end of said conduit with the grease gun.

As the Court has found in the instant case, the general combination of grease gun and hose coupler with means for detachably connecting the discharge end of the coupler with the pin fitting was old in Winkley. Therefore, it would seem to follow from Underwood v. Gerber, that if the particular construction of pin fitting was old as disclosed in the Gullborg patent 1307733, there could be no invention in the combination of this old pin fitting with the old grease gun and hose coupler as called for in claims 14 and 15 of Gullborg 1307734.

Respectfully submitted, Allen & Allen, of Counsel for the O. K. Mfg. Co. and The Larkin Automotive Parts Co.

We hereby certify that we have examined the foregoing petition for rehearing and in our opinion the petition is well founded in point of fact and law, and it is not interposed for the purpose of delay.

Allen & Allen, Counsel for the O. K. Mfg. Co. and The Larkin Automotive Parts Co.

[fol. 170] IN THE UNITED STATES CIRCUIT COURT OF APPEALS
FOR THE SEVENTH CIRCUIT

October Term, 1926, April Session, 1927

No. 3823

April 25, 1927

THE LARKIN AUTOMOTIVE PARTS CO. and MONTGOMERY WARD & Co., Appellants,

vs.

THE BASSICK MANUFACTURING COMPANY, Appellee

Appeal from the District Court of the United States for the Northern District of Illinois, Eastern Division

Before Evans, Page and Anderson, Circuit Judges

EVANS, Cir. J.:

This appeal involves the validity and infringement of three patents, to wit: Gullborg patent 1,307,733, Gullborg

patent 1,307,734 and Zerk patent 1,475,980—all owned by appellee.

Before considering the defenses to Gullborg's second patent we must determine the effect of a recent decision of the court of appeals of the sixth circuit (— Federal Reporter —, 2nd ed.) wherein the claims here contested were sustained and found to be infringed.

Upon motion of appellee and with consent of appellants, the decree appealed from in that case, the opinion of Judge Denison and the mandate of the appellate court have all been filed herein. From this record it appears that in one suit appellee sued appellant Larkin Automotive parts Co. in the District Court of Ohio and a decree for plaintiff was entered. No appeal was taken. A year later when an accounting was in progress, the court entered an order modifying somewhat its interlocutory decree and holding that certain of the defendant's products did not infringe this patent.

An appeal was then taken by the appellee herein and the court held that the claims of the patent here involved were valid and infringed.

While this suit was pending, the instant suit was brought in the Northern District of Illinois and Judge Lindley found the patent valid and infringed. (— Fed. Rep. —, 2nd ed.) From th-s decree appellants prosecuted the present appeal. [fol. 171] Much space may be saved by a reference to these two decisions for a statement of the facts, the prior art, the claims involved and a discussion of the issues presented.

These facts invoke the doctrine of res adjudicata or estoppel by judgment (Hart Steel Co. v. Railroad Supply Co. 244 U. S. 294) unless we conclude that the decree of the court of appeals of the Sixth Circuit is not final.

Final, as used by the courts when dealing with the subject of res adjudicata, is not to be determined by adjective terms. If the decree in fact finally determines the issues presented by the pleadings and settles the controversies over the subject matter involved, it is sufficiently final to determine other litigation between the same parties respecting the same issues regardless of the fact that it may be in legal nomenclature termed an interlocutory decree.

The Larkin Automotive Parts Co. cannot further contest the validity of the claims involved in this patent in the Ohio litigation. We conclude therefore that for the purposes

of applying the doctrine of res adjudicata, the decree of the Circuit Court of Appeals is a final decree so far as it determines the validity and infringement of claims one, two and six of Gullborg patent 1,307,734.

We recognize that the doctrine of res adjudicata in its strict sense may not be readily applied in patent suits because the infringement in the second suit would not ordinarily be identical with the infringement in the first suit. It would doubtless be more accurate to use the term, estoppel by judgment, than the term res adjudicata when applying the doctrine to patent suits. The result, however, is the same.

But we are not required to rest our decision solely on the doctrine of estoppel by judgment. As to appellant Montgomery Ward & Co., no estoppel exists, for it was not a party to the Ohio litigation. We believe, however, that the rule of comity leaves us no alternative but to affirm the decision of the District Court.

Appellee has sustained the claims of this patent here involved in over sixty federal district courts. In at least thirty-five suits, the infringers contested the validity of the patent. In every instance the patent was sustained. We see no reason why the rule of comity should not be applied to patent suits where the reason for the rule exists It is true that evidence bearing upon the prior art as ell as the issue of infringement may often differ on the second trial. Of course, if the difference is material, the rule of [fol. 172] comity has no application. In fact, it should not be overworked in any case. There is doubtless more danger of its too frequent appliance than otherwise. Certainly where only one other court has passed on the validity of the patent, this court would not be relieved of its duty to exercise its judgment uncontrolled by the decision of the other court. But where the question of validity, as here, turns upon the effect of the inventor's advance over the prior art, the opinions of other judges should not be ignored. In fact, when numerous courts have thus spoken, and all have reached the same conclusion, it would require an unusual case to justify the refusal to follow it. As was stated in Mast, Foos & Co. v. Stover M'f'g Co., 177 U. S. 489,

"The obligation to follow the decisions of other courts in patent cases of course increases in proportion to the number of courts which have passed upon the question, and the concordance of opinion may have been so general as to become a controlling authority."

Gullborg patent 1,307,733. This patent likewise was involved in both of the decisions cited above. No contention is made, however, that the Ohio decision is binding here for the parties are not the same.

This patent however has been before many District Courts and has been uniformly sustained. It validity has been assailed in some twenty different suits. In each instance, the attack failed. It has been so construed as to permit of a liberal equivalency of its novel element. In fact, in the Sixth Circuit Court decision, one of the infringing devices was similar to the device manufactured by appellant.

Appellant frankly concedes that on the issue of validity the only question is one involving invention. In other words, did the introduction of the novel element in the combination evidence mechanical skill or inventive genius?

In view of the discussion of these patents in the opinions referred to, nothing will be accomplished by an elaboration of our views. We conclude that claims three, four, and five of this patent are valid and infringed.

Zerk patent 1,475,980. Three claims (2, 3, and 5) are involved. Claim two is herewith set forth:

"2. In a lubricating apparatus the combination with a lubricant receptacle element of a lubricant reservoir ele- [fol. 173] ment of a lubricant reservoir for supplying lubricant thereto, means to put the lubricant in the reservoir under pressure, a lubricant feeding nozzle element, said reservoir communicating lubricant under pressure thereto, said receptacle element and said nozzle element having cooperative substantially non-compressible contact faces and opening therethrough, the nozzle contact face having a concavely spherical surface, the other contact face having a dirt cutting circumferential edge portion adapted to be embraced within the spherical surface of the nozzle face and providing the sole contact therewith when the nozzle is pressed against the receptacle element from any one of a

plurality of angularly different directions, to make a sealed, substantially non-yielding lubricant conducting connection between the face openings."

Figure three of the drawing is also reproduced as illustrating the novel elements of the claim.

Drawing

Fig. No. 3

Zerk Patent

No. 1,475,980

The asserted novelty of this patent lies in the "concavely spherical surface of the nozzle" and a "dirt cutting circumferential edged part adapted to be embraced within the spherical surface of the nozzle face." The results indicate that the introduction of these novel elements in the combination added materially to the solution of the problem that confronted the designer of apparatus for greasing automobile cars. Upon the oral argument we were giving a demonstration of its successful workings. The grease was placed under high pressure and with no leakage at the point of contact between the nozzle and the dirt cutting edge of the nipple. Witnesses testified to the necessity of high grease pressure—that with the Zerk apparatus, pressure of eight thousand pounds per square inch was obtainable. Under such pressure, the grease was transferred to the bearing without leakage at the joints. The [fol. 174] advantages of such results are obvious and need not be elaborated. It must be admitted, however, that advantageous as are the results and novel through the elements be, invention does not appear unless such an advance over the prior art was made as represented the genius of the inventor rather than the skill of the mechanic.

Appellants insist that this advance represents merely mechanical skill and was partially, if not fully anticipated, by the so-called White Company's lubricating system. Perhaps the best answer to this asserted anticipation is the action of the White Company. The White Motor Company abandoned its apparatus when Appellee's lubricatiig system appeared on the market. It was one of the first manufacturers to adopt the Zerk equipment. Without going into

detailed statement of the differences between White's apparatus or Wallace's patent No. 1,494,652 and Zerk's apparatus we will content ourselves by saying that neither was an anticipation of the concept or the structure of Zerk.

What Zerk undertook to do was, as he says, to design a cheaper gun that could be handled in one hand, and do away with the dust caps or provide means to exclude the dust and to get a perfect metal to metal contact between the feeding nozzle element and the lubricant receptacle element upon the automobile by making a dirt-cutting circumferential edge portion upon one element to fit into an angle the conically spherical element of the other element. While there are certain important features described in the specifications, apparently not covered by the claims in suit, we are of opinion that the Zerk construction, made in accordance with the claims, is a distinct advance in the respects described by him over the known practices of the art and that claims involved, 2, 3, and 5, are valid.

It is hardly necessary to discuss the question of the infringement of these claims for they were all clearly infringed.

When this appeal was allowed, the court stayed the injunctional part of its decree upon the understanding that this case would be presented to this court at the October 1926 session. In view of the delays that have occurred in hearing and disposing of this appeal, we think it necessary for the due protection of the prevailing party that this order be vacated.

The decree is affirmed. The order of the District Court [fol. 175] staying the enforcement of the decree is hereby vacated.

A true Copy.—Teste:

—— ——, Clerk of the United States Circuit Court of Appeals for the Seventh Circuit. Rec'd Aug. 22, '27.

PLAINTIFF'S EXHIBIT "L"—Stipulated Otis Testimony

Supreme Court of the United States

October Term, 1927

No. 442

THE O. K. MANUFACTURING COMPANY, Petitioner,

v.

THE BASSICK MANUFACTURING COMPANY

No. 433

THE LARKIN AUTOMOTIVE PARTS COMPANY, Petitioner,

v.

THE BASSICK MANUFACTURING COMPANY

Petition for Writs of Certiorari to the United States Circuit Court of Appeals for the Sixth Circuit and Brief in Support Thereof

Alfred M. Allen, Wellmore B. Turner, Counsel for Petitioners.

(32,894)
(32,895)

[fol. 176] Index

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[fol. 177] Supreme Court of the United States

October Term, 1927

No. 442

The O. K. Manufacturing Company, Petitioner,

v.

The Bassick Manufacturing Company, Respondent

No. 443

The Larkin Automotive Parts Company, Petitioner,

v.

The Bassick Manufacturing Company, Respondent

Petition for Writs of Certiorari to the United States Circuit Court of Appeals for the Sixth Circuit and Brief in Support Thereof

To the Honorable the Chief Justice and Associate Justices of the Supreme Court of the United States:

Your petitioners, The O. K. Manufacturing Company and The Larkin Automotive Parts Company, respectfully prays for the issuance of writs of certiorari to review a decision and decrees of the United States Circuit Court of Appeals for the Sixth Circuit in the above-entitled causes, which are actions for the infringement of patents.

Question Presented

The question presented for determination in the instant case is identical with the issues before this Court in Underwood vs. Gerber, 149 U. S., 224, and the question to be determined is whether the interpretation put upon that case by the Circuit Court of Appeals of the Sixth Circuit is correct or incorrect.

Brief Statement of the Case

The patent involved is No. 1,307,734, for a lubricating means, granted June 24, 1919, on an application filed December 21, 1918, to Arthur V. Gullborg. The claims in- [fol. 178] volved were claims 14 and 15 of that patent.

The invention consists of a tubular member having one end flanged inwardly to provide a closure seat, for a closure member, with a pin extending through the tubular member and on both sides thereof with a spring confined between the pin and the closure member to hold the closure member on its seat and a grease pump with a discharge conduit and a bayonet slot connection with the pin for detachably connecting the discharge end of the pump to the tubular member.

This special construction of tubular member is identified in the records and opinions as a pin fitting by reason of the fact that each fitting carries a pin driven transversely through it and projecting at each side into the open, adapted to make a union of the bayonet joint type with various forms of coupling members attached to the discharge end of a grease gun.

Devices of the kind in question were introduced in enormous quantities by the respondent under the trade name of the "Alemite High Pressure System," and the grease cups, which had heretofore been in use generally for the lubrication of bearings in automobiles, were removed and the tubular members substituted therefor. The Alemite High Pressure System has been quite generally adopted and installed on something like 7,000,000 automobiles, and the essential issue presented is the right of competing manufacturers to furnish grease guns, upon which there are no patents, for this lubrication.

The validity of the Gullborg patent, No. 1,307,734, was in issue with a number of other patents in separate suits brought by The Bassick Manufacturing Company against a number of different manufacturers, including your petitioners.

The various cases were argued at different times in the Circuit Court of Appeals for the Sixth Circuit, but the cases were consolidated by that court and a decision rendered March 23, 1927, in all of the cases (18 Fed. Rep., 2d, 29) (Larkin Record, pp. 436-456; O. K. Record, pp. 323-343).

Thereupon a petition for rehearing and a supplement thereto was filed by your petitioners, which petition was subsequently denied and the order entered May 13, 1927 (Larkin Record, pp. 474-475; O. K. Record, pp. 357-358).

Among the patents before the court of appeals was the [fol. 179] patent to Gullborg, No. 1,307,733, granted June 24, 1919, on an application filed February 11, 1918, for a lubricating apparatus identical with the invention disclosed in patent No. 1,307,734, so far as the claims in issue were involved.

This patent, No. 1,307,733, however, only claimed the tubular member construction, and while it disclosed the grease pump and coupling means, without which the tubular member and its parts would be useless, it did not claim the grease pump and its coupling connection, leaving that combination for the later filed application of December 21, 1918.

We select claim 15 of patent No. 1,307,734 for comparison with claim 4 of patent No. 1,307,733, which we have placed in parallel columns.

Patent 1,307,733 Claim 4	Patent 1,307,734 Claim 15
1. A tubular member.	1. A tubular member.
2. One end flanged inwardly to provide.	2. One end flanged inwardly to provide.
3. A closure seat.	3. A closure seat.
4. A closure.	4. A closure.
5. A pin extending through the tubular member.	5. A pin extending through the tubular member.
6. From both sides thereof.	6. From both sides thereof.
7. A spring confined between the pin and closure and tending to hold said closure on its seat.	7. A spring confined between the pin and closure and tending to hold said closure on its seat.
	8. A grease pump having a discharge conduit.
	9. Means coacting with the ends of the pin for detachably connecting the discharge end of said conduit with the grease pump.

We have selected claim 15 as more definite than Claim 14, which claim calls for a connection of the discharge end of the conduit with the grease pump, a construction not shown in patent 1,307,734, although it is shown in patent 1,307,733. The defense is that the use of the grease pump [fol. 180] and means for connecting to the fin fitting is a necessary part of the invention of patent No. 1,307,733. The whole complete invention of claims 14 and 15 is fully disclosed in patent No. 1,307,733. The invention is for a specific construction of pin fitting which is entirely useless and not a complete invention unless combined or used with a grease pump and means for attaching it to the pin fitting.

There was no patentable invention in the combination of a pin fitting with a grease pump and means for detachably connecting the grease conduit to the pin fitting.

This combination is fully shown in Winkley, 1,201,414, of October 17, 1916, reissue 14,667, more than two years prior to Gullborg.

The situation in the instant case seems exactly parallel with the situation in Underwood vs. Gerber, 149 U. S. 224.

In that case the patent in suit No. 348,073 claimed:

"A sheet of material or fabric coated with a composition composed of a precipitate of dye matter in combination with oil, wax or oleaginous matter."

The other patent, No. 348,072, claimed:

"A composition composed of a precipitate of dye matter in combination with oil, wax or oleaginous matter."

This Court held that the composition called for in No. 348,073, as coated on fabric, was already known and described in patent No. 348,072.

In the lower court leave was given the complainant to amend its bill alleging ownership and infringement of patent No. 348,072. This the plaintiff failed to do, and the bill was dismissed.

This Court held the decree of the lower court must be affirmed, saying: "There was no patentable novelty or invention in view of earlier patents and publications in applying an *existing coloring substance* to paper." (Italics ours.)

This Court further held that inasmuch as the composition was not claimed in No. 348,073, the claim actually

made operated in law as a disclaimer of what was not claimed, and that there was no invention in applying it to the paper as claimed in patent No. 348,073.

[fol. 181] In every respect the instant case is in complete accord with Underwood vs. Gerber.

If the invention in Underwood vs. Gerber was obviously only in the new composition, the effect was the same as in the instant case, which led this Court to say that two valid patents for the same invention cannot be granted either to the same or a different party, citing Miller vs. Eagle, 151 U. S., 186, and also citing Miller vs. Brass Co., 104 U. S., 350.

The essence of the Underwood vs. Gerber case is that patents can only be valid which embody some new invention, and that where the combination of parts is old, as is evident from the reference in Underwood vs. Gerber to the prior use of other compositions applied to paper and by the reference to Winkley in the instant case, and the inventor has improved one of the parts, the composition in that case and the pin fitting in the instant case, no valid patent can issue for the substitution in the old combination of the new part, and the only valid patent must be for the new thing.

This is the doctrine which governs the Commissioner of Patents in issuing patents and was first announced in Ex Parte McNeil, 20 App. D. C., 294.

In that case the invention consisted of an improvement in sewing machines in which a combination of a trimmer with a new stitch-forming mechanism was claimed. The court said:

"Borton and Willcox having invented the combination of a trimmer with a stitch-forming mechanism, it is not invention to combine a trimmer with another stitch-forming mechanism whether the stitch-forming mechanism be new or old. No new result is accomplished by appellant which differs in kind from the result accomplished by Borton and Willcox."

This doctrine was approved in Langen vs. Warren Axe Tool Co., 184 Fed. Rep., 720.

"The grab-hooks and draft appliance of the patent, in combination, coact as grab-hooks and draft appliances have always done. The grab-hook of the patent by reason of its

peculiar construction and form is very probably an improvement of no little utility. But the patentee can not, merely because of that fact, have a patent for a combination which shall have, as one of its elements, a pair of such grab-[fol. 182] hooks. He did not invent the combination. He invented, if he invented anything, an improved grab-hook."

See also: Bradley vs. Eccles, 143 Fed. Rep., 522.

The court of appeals refused to apply the doctrine of Underwood vs. Gerber that there could be no invention in a claim for the combination of an earlier specific construction in combination with an old device with which it must be used. It declined to consider the disclosure of patent No. 1,307,733 as an "earlier construction," contrary to the holding of this Court in Underwood vs. Gerber, in which this Court had held that the specific composition of the earlier patent was an existing substance and that there was no invention in applying this existing substance to paper in view of the fact that it was old to apply other compositions to paper.

In taking this position the court of appeals contented itself with a reference to its discussion of Underwood vs. Gerber in MacGregor vs. Vaco Grip Co., 2 Fed. (2d), 655), where the case of Underwood vs. Gerber was taken to apply only in the case of an inseparable process and product, and it was held that Judge Blatchford had made an unnecessary reference to the composition of the earlier patent as an "existing substance."

In thus holding, the Sixth Circuit Court of Appeals disagreed with the finding of the Court of Appeals of the Second Circuit in Doig vs. Morgan Co., 122 Fed., 460, 462, in its interpretation of the Underwood case.

But in the MacGregor case, 2 Fed. (2d), 655, the facts are clearly distinguishable from the facts in the case at bar.

In the MacGregor case the two Smith patents, No. 1,439,-338 and No. 1,439,339, both involved patentable improvements. The claims in 1,439,339 covered patentable improvements over the claims in the generic patent 1,439,338, and the court held that they could not consider Underwood vs. Gerber as going to the extent of holding that the earlier numbered patent was prior art as to the later patent.

In the instant case there is only one invention. The entire invention is disclosed in the first patent. The pin fit-

ting is useless without the grease pump and attaching means.

[fol. 183] The Sixth Circuit distinguished the MacGregor case from Underwood vs. Gerber because the second patent disclosed patentable improvements over the first patent. In its comments the court said (p. 657):

"In Underwood vs. Gerber it was thought that the splitting up of one indivisible right into two and subjecting the infringer to suits by two different owners of the right infringed justified applying the defense of double patenting as against two patents issued on the same day. Of course, the substance must be existing before it could be spread on paper. The case was practically one of inseparable process and product. The composition was not a useful or completed invention until it was spread upon the paper; the specification of the composition patent described the spreading; and the claim by necessary implication included the spreading. We take this to be the principle of decision which should be deduced from Underwood vs. Gerber rather than any inference from the unnecessary reference to 'an existing substance.'"

In the instant case the specific pin fitting corresponds to the composition and the grease pump corresponds to the use of the composition on the paper fabric. The Underwood vs. Gerber case can be read directly on the instant case by merely substituting for "composition," the phrase "specific pin fitting," and substituting for the "paper material," the phrase "grease pump and connecting devices." The interpretation of Underwood vs. Gerber as given in the MacGregor case assumed a set of a, b, c claims in one patent and a, b, c, and d claims in the second patent, and they were of the opinion that the a, b, and c patent could not be used as prior art to the a, b, c, d patent even if there was no invention in adding the d element on the a, b, c combination.

The vital difference between the MacGregor case and the instant case is that the a, b, c, d invention of Gullborg is shown and described in the first a, b, c patent No. 1,307,733, and could have been claimed in that patent, and, not being claimed, was disclaimed, in view of Miller vs. Brass Co., 104 U. S., 350, and under such circumstances the second patent must be invalid.

It is submitted that the time has arrived when this Court should reaffirm and reestablish the true doctrine of Under- [fol. 184] wood vs. Gerber, which has apparently been misconstrued and misinterpreted by the lower courts. The case was cited only twice by this Court until the present term; once in Brigham vs. Coffin, 149 U. S., 557, 562, decided at the same time as the Underwood case, as to the character of the inventive step, and at the next term of the court in Miller vs. Eagle Co., 151 U. S., 186, 198, in support of the proposition that where a patentee obtained two patents on the same day, upon applications filed on the same day, they could not be treated as one patent with two claims.

It was again cited by this Court in the recent Milburn case, 270 U. S., 390, 401, where this Court decided that an earlier filed application describing the invention, but not claiming it established priority, but the case was only cited on the proposition that the publication in a patent of an unclaimed invention was a dedication to the public of the invention not claimed.

It has also been cited by Judge Lacombe in the New York Circuit Court in Writing Company vs. Elliott Co., 106 Fed. Rep., 507, 508, on the proposition that as against a later numbered patent issued on the same day, the earlier numbered patent is none the less "earlier" and is to be taken as a part of the prior art.

Again, in the Second Circuit Court of Appeals the case was cited in Doig vs. Morgan Machine Co., 122 Fed. Rep., 460, 462, in support of the proposition that where suit is brought on a later patent, an earlier patent to the same patentee is prior art, but in this case the two patents were not issued on the same day. It has also been cited in Guthrie vs. Curlett, 10 Fed. (2d), 725, 726, in the Second Circuit to the effect that a patent must disclose a new and useful art, machine, manufacture or composition of matter and must claim the invention.

The doctrine of Ex parte McNeil, supra, 20 App. D. C., 294, which serves as a guide to the Commissioner of Patents in the allowance of patent applications, and which bears a close relation to the issues here has not been in terms approved by this Court, nor the principle as announced in Langen vs. Warren Axle Co., supra, 184 Fed. Rep., 720.

It is respectfully submitted that the instant case is one of great gravity and importance not only with respect to the petitioners, but also with respect to vital interests of

the public. When we consider that there are some 7,000,000 innocent car owners who have purchased their cars free [fol. 185] from monopoly of the Bassick Company patents, who become infringers of this Gullborg patent when they make use of any old and non-patented grease gun for lubrication of their cars, the far-reaching results of this decision are apparent.

The component parts of the Alemite System are tools which comprise a grease gun, coupling member, and a series of pin fittings on the various parts of the car requiring lubrication. The pin fittings are not a permanent part of the combination, but are attached to the bearings to be lubricated on the machine or automobile and become a permanent part of the automobile structure.

Only one grease gun and coupler is used for each machine. The Bassick Company makes a contract with the automobile manufacturer to equip all of its cars with pin fittings, and it furnishes a grease gun and coupling for each car.

The owner of the car is the only one who puts the device together, and completes the combination.

The 14th and 15th claims of the Gullborg patent have been so broadly construed that this decision prohibits the use of any old unpatented grease gun for use in the lubrication equipped with the pin fittings of the Gullborg patent, and it denies the right of the owner of the car equipped with the pin fittings to drive to a public garage and have his car lubricated with a grease gun not purchased from the Bassick Company.

It is not intended to suggest that a patent which creates a monopoly on the use of certain tools should be held of no effect merely because the public is affected by such results; but it is respectfully submitted when such is the result and large numbers of people are affected thereby, the public interests require that so broad a construction be given to the patent only after a judicial examination which leaves no doubt as to the correctness of such construction.

Respectfully submitted, Alfred M. Allen, Counsel for Petitioners. Wellmore B. Turner, Counsel for Petitioners.

[fol. 186] (Cover)

SUPREME COURT OF THE UNITED STATES

October Term, A. D. 1927

No. 442

THE O. K. MANUFACTURING COMPANY, Petitioner

v.

THE BASSICK MANUFACTURING COMPANY, Respondent

No. 443

THE LARKIN AUTOMOTIVE PARTS COMPANY, Petioner

v.

THE BASSICK MANUFACTURING COMPANY, Respondent

Reply Brief of Petitioners to Respondent's Brief in Opposition to the Petition

Alfred M. Allen, Wellmore B. Turner, Counsel for the Petitioners.

[fol. 187] SUPREME COURT OF THE UNITED STATES

October Term, A. D. 1927

No. 442

THE O. K. MANUFACTURING COMPANY, Petitioner

v.

THE BASSICK MANUFACTURING COMPANY, Respondent

No. 443

THE LARKIN AUTOMOTIVE PARTS COMPANY, Petioner

v.

THE BASSICK MANUFACTURING COMPANY, Respondent

REPLY BRIEF OF PETITIONERS TO RESPONDENT'S BRIEF IN OPPOSITION TO THE PETITION

Respondents assert that petitioners are asking the Supreme Court to assume jurisdiction upon an issue not pleaded, tried or argued in the lower Court.

In this assertion respondents are in error. The pleadings show, that in both the O. K. and Larkin cases suit was

brought on the Gullborg patent #1,370,734 (O. K. Record, p. 2, Larkin Record, p. 2); that in the answer in the O. K. case the Gullborg patent #1,370,733 was pleaded as containing a disclosure of the invention of Gullborg patent #1,307,734 (O. K. Rec., pp. 11, 14), and that the same defense was made in the answer in the Larkin case (Larkin Rec., pp. 8, 9). The record also discloses that in the Larkin case the Gullborg patent #1,307,733 was offered in evidence (Larkin Rec., p. 95) and referred to by petitioners expert (Larkin Rec., pp. 127, 128, XQ 27 and 31).

In the O. K. case the testimony in the Larkin case was by stipuation to be used in the O. K. case (O. K. Rec., p. 102). The two patents were therefore before the Court below, and the question whether the invention of Gullborg patent #1,307,734 was not disclosed in Gullborg #1,307,733 was directly in issue. This issue was directly decided by the Court of Appeals of the Sixth Circuit: "It follows [fol. 188] that claims 14 and 15 are valid." (O. K. Rec., p. 337, Larkin Rec., p. 450.)

The second contention of respondent's brief is that the issue raised in the petitions for the writs of certiorari is an issue of "double patenting" which should have been pleaded.

Here again respondents are in error. There is no issue of "double patenting" raised by the petitions for the writs of certiorari. The only issue is that of non-invention. It is not contended that patent #1,307,734 is the same as patent #1,307,733. The contention is that there is no invention in claims 14 and 15 of patent #1,307,734 in view of #1,307,733, the issue properly raised by the pleadings as above set forth.

This misunderstanding of our position probably arose from the fact that at the top of page 7 of the brief on the petition we referred to Miller v. Eagle, 151 U. S. 186, as being cited by this Court in Underwood v. Gerber. This was obviously an error as the latter case was decided at a previous term. The Court, however, in Miller v. Eagle did cite Underwood v. Gerber to the effect that two patents issued on the same day could not be treated as one patent with two claims.

As pointed out in our brief on the petition, the true doctrine of Underwood v. Gerber is that there can be no invention in an old combination of parts by the substitution in the old combination of an improvement which involves

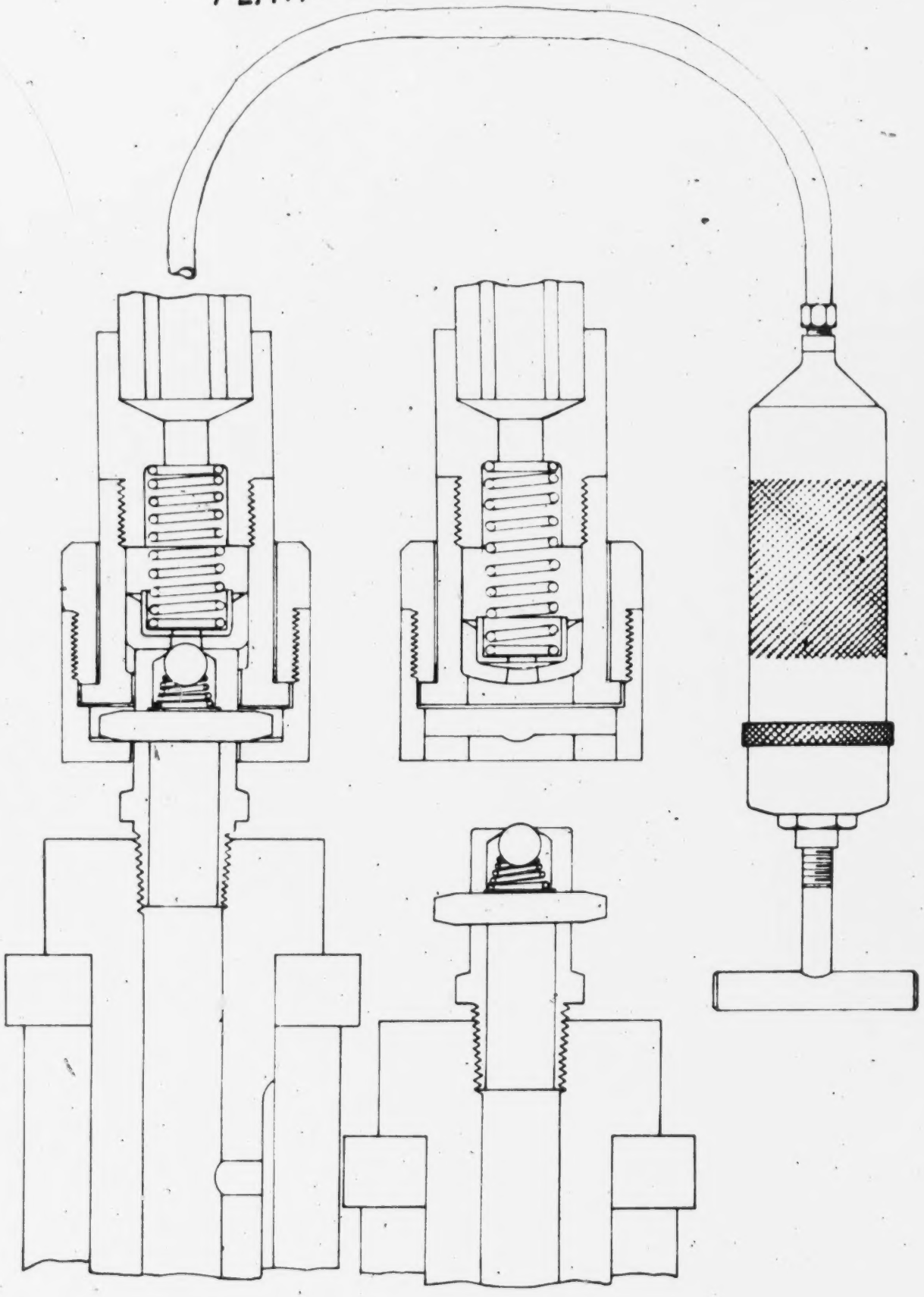
solely one of the parts if no new result is accomplished by the substitution. If the invention is in one of the parts, then the patent should be for the new thing and any subsequent patent, even issued on the same day for the old combination, is void for lack of invention. It is this doctrine that so largely governs the administration of the Patent Office as defined in Ex parte McNeil, 20 App. D. C. 294, and we submit that this principle should be reaffirmed and reestablished to prevent further confusion and uncertainty.

The exact question presented by the petition for the writ of certiorari was at issue in the pleadings and evidence, and was presented to the Court of Appeals of the Sixth Circuit on the petition for rehearing, to which petition the respondent filed an answer and brief in opposition in which the questions here presented were argued at length, upon consideration of which the Court of Appeals reaffirmed its original finding that claims 14 and 15 of Gullborg #1,307,734 were valid.

Certainly the present application comes clearly within [fols. 189 & 190] the terms of Sec. 240 of the Judicial Code under which this cause may be ordered to be certified to the Supreme Court for determination.

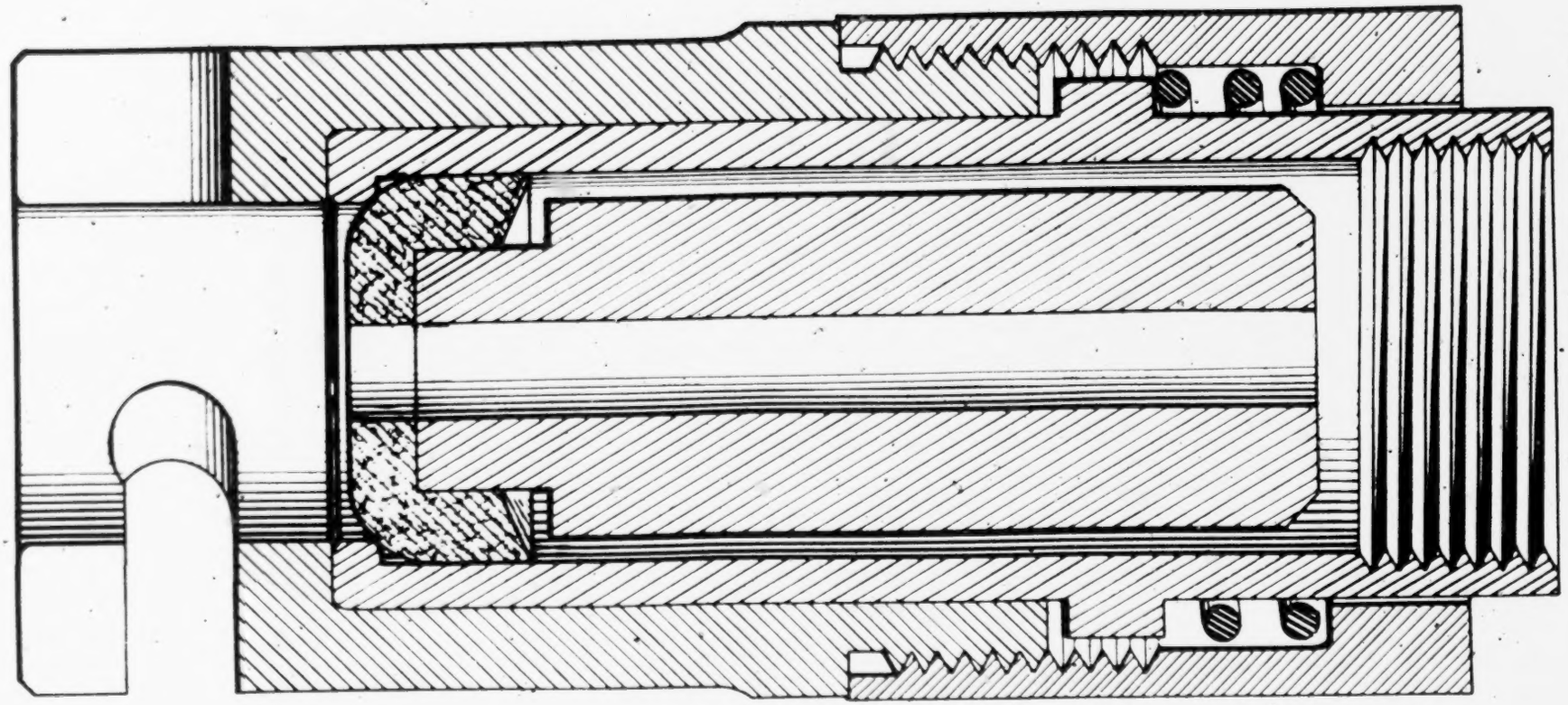
Respectfully submitted, Alfred M. Allen, Welmore B. Turner, Counsel for the Petitioners.

PLAINTIFF'S EXHIBIT M



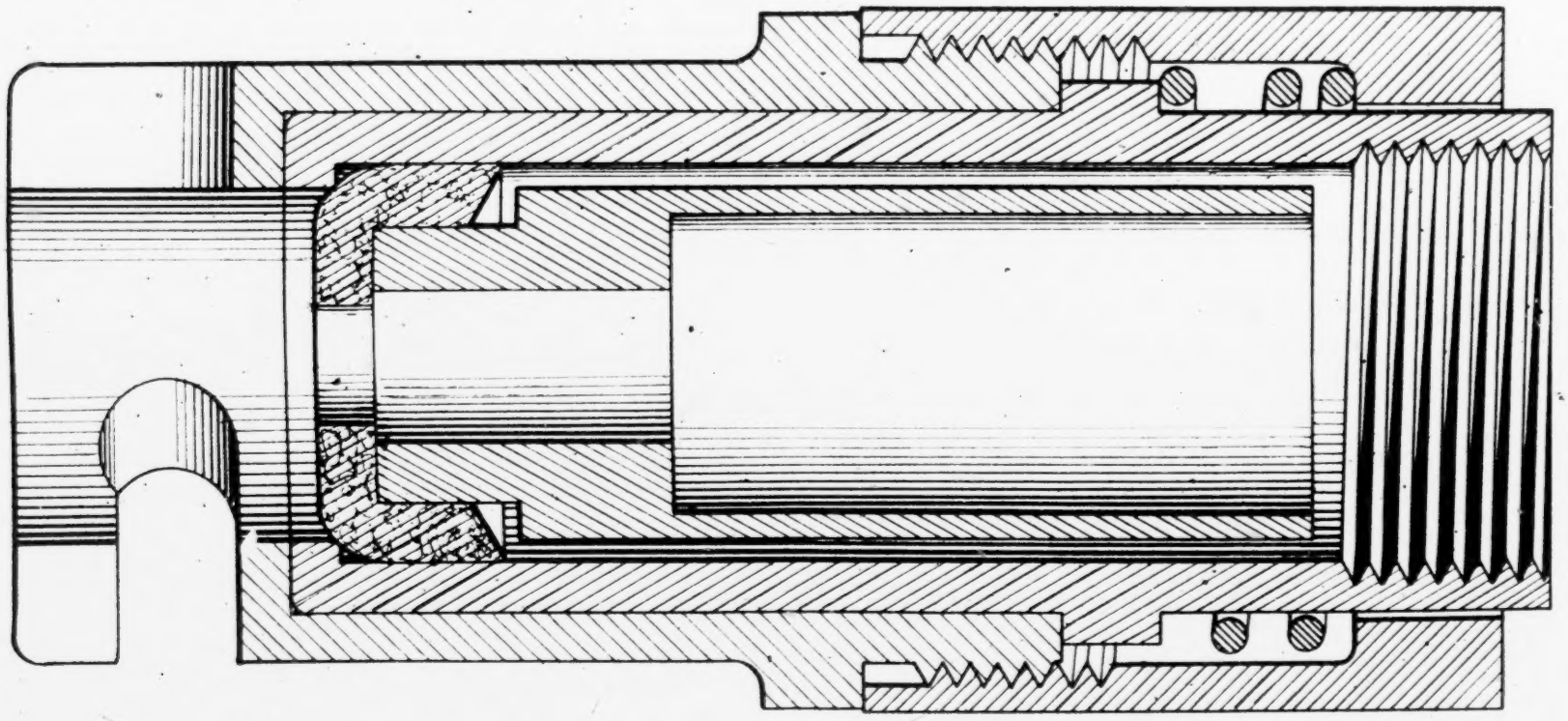
GJT

EXHIBIT U. AHLBERG AFFIDAVIT
J. LINDLEY'S ORDER OF MAY 27 - '27



PLAINTIFF'S EXHIBIT O-3

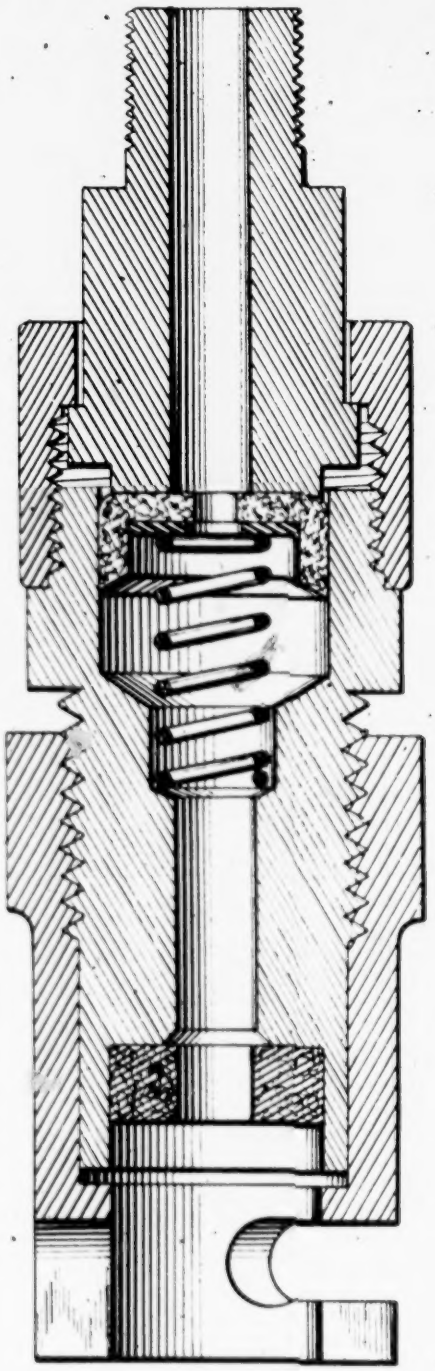
EXHIBIT V. AHLBERG'S AFFIDAVIT
J. LINDLEY'S ORDER OF MAY 27, 1927



PLAINTIFF'S EXHIBIT O-4
193

PLAINTIFF'S EXHIBIT O-6

EXHIBIT G. SAMITOSKI AFFIDAVIT
J. LINDLEY'S ORDER OF MAY 27-1927



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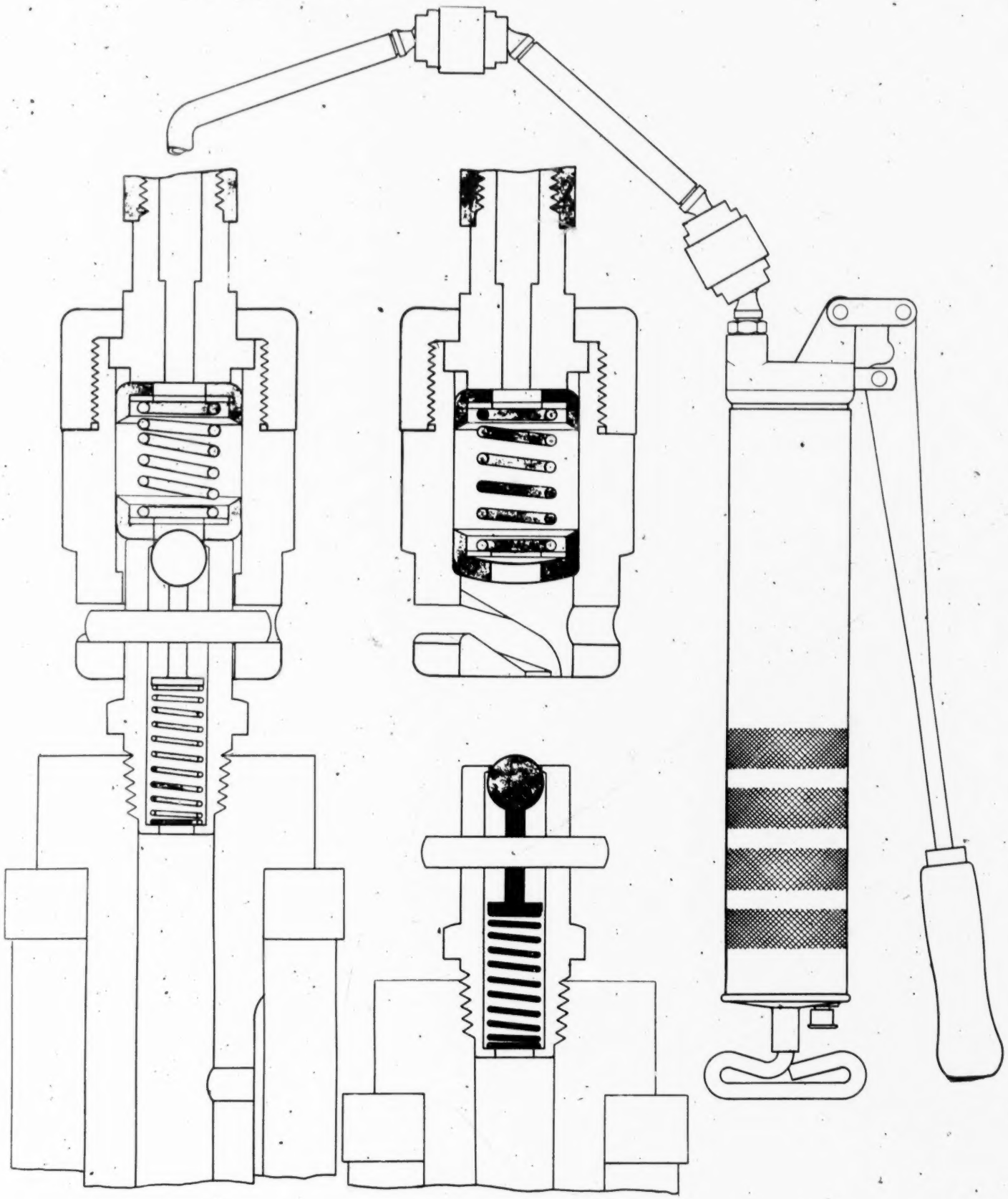

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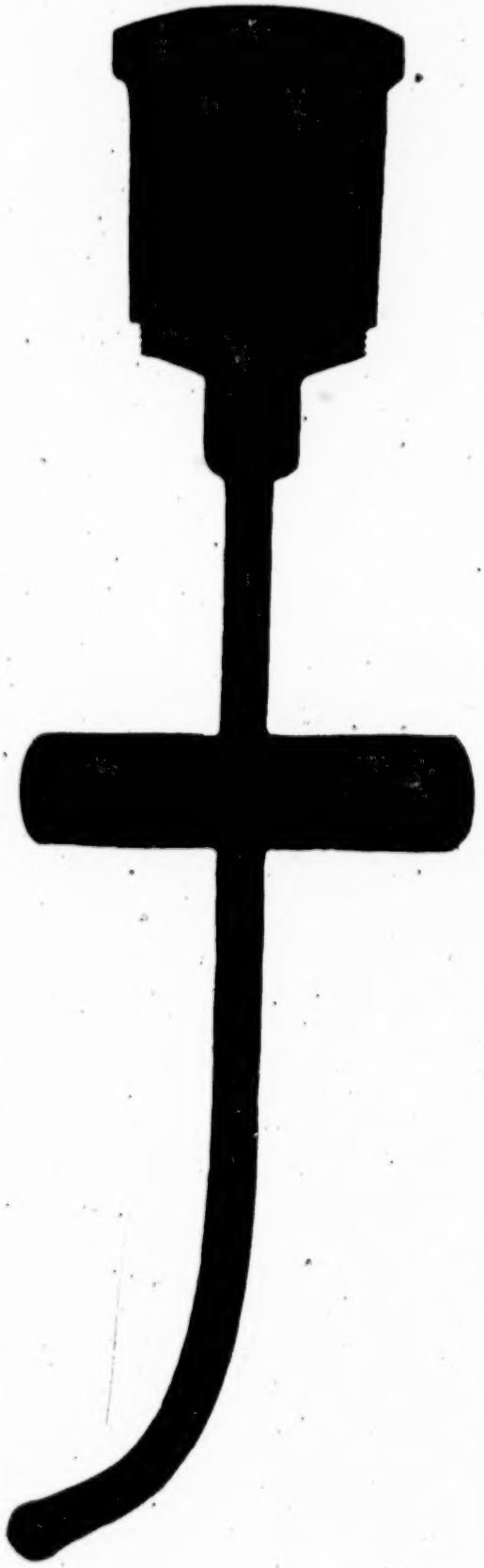


PLAINTIFF'S
EXHIBIT BB

Fig. 1.

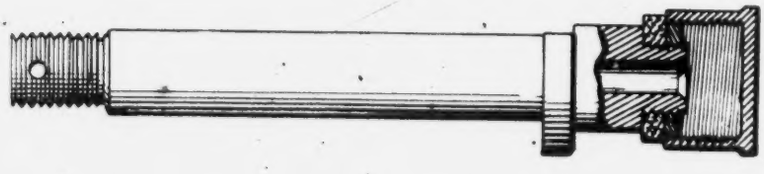
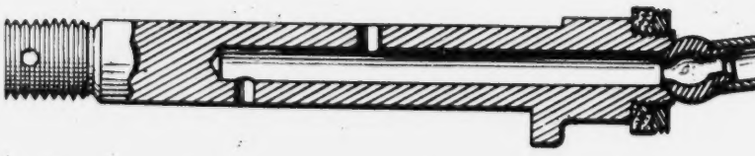
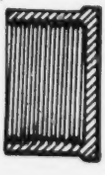


Fig. 2.





[fol. 199] IN UNITED STATES DISTRICT COURT

Statement of Evidence

TESTIMONY ON BEHALF OF DEFENDANT TAKEN BY DEPOSITION UNDER R. S. 863 AND CONDENSED PURSUANT TO EQUITY RULE 75—Filed Dec. 31, 1928

HUGO C. GIBSON, called as defendant's mechanical expert witness, testified that:

His age is 53, his occupation is Consulting Engineer; and he resides in Philadelphia, Pa.

Mr. Gibson gave as his qualifications, briefly:—technical education at the City and Guilds of London, Technical Institutes at Finsbury, London, England, and after completing his course at that college he associated with various engineering concerns in the manufacturing and installation of various classes of machinery including gas engines, electric light and power machinery, and complete installations of electric light and power machinery, and complete installations of electric light and power including the prime movers. He was engaged as manager of manufacturers of electrical apparatus and also operated in connection with the manufacture of sewing machines, etc. In about 1890 he built and operated automobiles in England; and since 1906 in the United States he has acted as Consulting Engineer in automotive matters for various automobile manufacturers, including the Matheson Motor Car Co. of Wilkes-Barre, Pa.; Velie Motor Co. of Moline, Ill., and others; and he was for some time Chief Engineer of the R. & V. Motor Co. of East Moline, Ill., manufacturing automobiles and Knight sleeve valve engines. He is associate member of the Institution of Electrical Engineers; and member of the Society of Automotive Engineers.

Mr. Gibson then stated that he is familiar with the disclosure of the Gullborg patent No. 1,307,734 in suit, and described briefly the main mechanical devices shown in the drawing and described in the specification of that patent, as comprising a pump acting as a grease receptacle and provided with a piston with a screw threaded shaft and handle for operating the piston, whereby pressure may be put upon

grease, tending to force it out of the pump; a flexible hose attached to the exit of the pump and at the other end of the flexible hose a coupling device having a bayonet slot. A grease cup, nipple or fitting having a screw thread at one end permitting that fitting to be attached to a bearing of a machine, provided with a pin or peg passing through the barrel or body of the fitting, for the purpose of completing [fol. 200] a bayonet arrangement for coupling the coupler to the fitting and also for the purpose of supporting one end of a spring, the other end of which spring presses against a ball, which ball serves to close the end of the fitting, as a check valve. The relation of the coupler of Figures 1 and 2 with the fitting of Figures 3, 4, 8 and 9 is shown in Figure 5 where the coupler is assembled to the fitting, and both are shown in section. Figure 7 shows a method of attaching the fitting to one end of a hose whereby lubricant fed to the fitting may be carried through the hose to some distant bearing. Figure 6 shows part of the chassis of an automobile with a number of places indicated thereon where the fittings may be placed, whereby the pump, hose and coupler shown in Figure 1 may be attached to those fittings, and so the bearings to which those fittings are related may be lubricated by the operation of the grease pump.

Mr. Gibson stated that he is familiar with the commercial practices in lubricating automobiles and that the portable pump, hose and coupler shown in Figure 1 of the drawing of the Gullborg patent in suit, are generally referred to in the trade, for short, as the "compressor."

Mr. Gibson then stated that in bayonet couplings or connections which have been in use for coupling either rods or conduits together, ever since the beginning of mechanical engineering, have had two parts; one, the male part and the other, the female. The male part is usually provided with one or more pegs, lugs or projections from the side of its body; while the female part is provided in its shell with slots arranged at various angles to the axis of the female part, of such size and shape as will accommodate the shape of the pins, lugs or projections of the male part and usually so arranged that when the female part is placed upon the male part and the pins of the male part engage with the slots of the female part, the rotation of the female part

will cause the pins to slide axially along the inclined plane of the slots of the female part and so bring the two parts of the coupling forcibly together for the purpose of either holding rods tightly united to one another or for holding the end of a hose tightly to the end of another hose and prevent leakage of the liquid carried through the hose, and for other purposes of similar character.

The Gullborg coupling as is particularly detailed in section in Figure 2 of the Gullborg patent, is provided within its bore which is specially enlarged for a distance, with a flexible, cup-shaped washer having a hole or perforation in the disc part of that washer; this washer being so placed [fol. 201] that its cylindrical wall is in contact with the wall of the enlarged bore of the coupler. There is a spring pressing against the inner face of the disc of the cup washer and the bore in which the cup washer fits being enlarged, as stated, has necessarily a shoulder against which the cup washer is pressed by the action of the spring. That spring has an abutment provided so that it may press upon the washer and that abutment is formed by the end of the hose which is solidly fastened to the body of the coupler. The mouth of the coupler is provided with the bayonet slots. The fitting or grease cup which co-operates with this coupler is shown in detail section in Figure 4 of the Gullborg patent and consists of a body or shell having at one end a screw thread, whereby the fitting may be screwed into the body of a bearing, housing or journal box and be left permanently therein. At the other end of the body or shell the wall is turned inwardly to form a seat for a ball forming a check valve. The ball is pressed against that seat by means of a spring and that spring abuts against the approximate center of a pin passing through the body of the fitting, which pin has the projecting ends which appear outside of the body of the fitting and forms the male portion of the bayonet joint.

In lines 59 to 102 of page 2 of the specification of the Gullborg patent, it is stated that in the act of uncoupling the female coupler from the fitting a movement of the cup washer (being spring pressed within the coupler) would cause a small quantity of lubricant to be forced into the male fitting part, and that a further movement of uncoupling would cause that cup washer to move outwardly

toward the mouth of the coupler and thereby produce a slight vacuum which, it is there said, causes any grease which might remain on the male fitting to be sucked back behind the cup washer, thereby cleaning the male fitting of excess grease.

The mechanical theory behind this function of Gullborg's coupler construction is that if a piston is moved in a cylinder, some change of pressure must take place; that a change of volume must take place and it is apparently assumed by this inventor that such an action will take place in the operation of his device whereby, so he says, a vacuum would be produced which would cleanse the fitting of any excess grease which might tend to remain on that fitting.

In the actual operation of compressors of this kind, very high pressures are generated in the hose and coupler. In fact, anywhere from 500 to 10,000 pounds per square inch [fol. 202] may be developed. This statement is based upon the fact that hydraulic methods, which is the principle upon which these devices operate, easily render it possible to produce such pressures; not only the compressor of the Gullborg patent, but other compressors which will develop much higher pressures than could be obtained by the hand screw method of the Gullborg patent compressor.

Considering the normal operation of the particular compressor shown in the Gullborg drawing, there could be no such self-cleansing action inasmuch as, while there is provided in this coupler device a very small cup washer arranged to reciprocate within the coupler body, yet if that cup washer does so reciprocate the total change of volume that could be produced by that movement would be incapable of producing a vacuum at any point within the apparatus to offset the pressures which are existing throughout the apparatus. Consequently, vacuum being only a condition of pressure, the net result of the use of the apparatus is always pressure and not vacuum, even when used in the manner indicated in the specification of the Gullborg patent.

Assuming that the spring-pressed, slideably mounted cup washer in the Gullborg coupling were in fact capable of producing the suction described in the specification and the resultant self-cleansing action, it would be essential that the lubricant, the grease within the lubricating apparatus, should be under no pressure, in order that any indication

whatever of a tendency to create a vacuum such as the inventor Gullborg theorized upon, should be observable.

There is no means whatever disclosed in the specification, nor are there any directions in the specification of the Gullborg patent which would teach or instruct how to relieve the pressure of the grease before uncoupling so that the coupler function may properly result.

In order to operate the compressor shown in Figure 1 of the Gullborg drawing, in a manner most favorable to the creation of the suction in the Gullborg coupler referred to in the specification, one would be compelled to introduce some new apparatus or new actions, or something other than is indicated in the Gullborg patent, and one of these might be the addition of a stop cock, the opening of which would release the pressure from within the apparatus; or it would be possible to relieve the pressure to some extent by retracting the piston of the pump of Figure 1 by unscrewing the handle.

The specification of the Gullborg patent does not instruct [fol. 203] the user to back off the piston of the pump prior to uncoupling, in order to allow the coupler to produce the suction referred to.

Considering the various elements of claim 8, the

"apparatus having a part to be lubricated"

recited as an element of claim 8 of the Gullborg patent in suit is nothing other than the automobile chassis shown in Figure 6 of the Gullborg's patent drawing on which there are a number of bearings to be lubricated.

The

"conduit for conducting lubricant to said part"

recited as an element of claim 8, is the passage through the metal housing of the bearing which requires lubrication, or is a conduit from one part of the automobile chassis to the part to be lubricated, and is referred to by the reference numeral 38 in Figure 6.

The

"coupling member screwed to the end of said conduit and provided with a spring-pressed valve closure"

recited as an element of claim 8, is the male grease cup or "fitting" shown in Figures 3, 4, 5, 7, 8 and 9 of the Gullborg patent drawing. That coupling member is

screwed to the end of the various conduits of the automobile chassis of Figure 6 and is provided with a spring-pressed closure.

The

"means for supplying lubricant to said conduit comprising a receptable provided with a discharge outlet"

forming part of claim 8, are shown as a whole in Figure 1 and comprise a receptacle 15, and a discharge outlet which may be anywhere along the hose 19.

The

"second coupling member connected with said discharge outlet"

is the coupler 21 of Figure 1 of the Gullborg drawing.

The

[fol. 204] "means for detachably uniting said coupling members"

forming part of claim 8, are the bayonet slots of the coupler 21, identified by the numerals 22 and 23, and the pins 31 of the male member 29.

The

"means for sealing the joint between said coupling member and for removing excess lubricant from the adjacent ends thereof when said coupling members are uncoupled"

forming part of claim 8, is the cup-shaped washer shown in Figures 2 and 5 and identified by the numeral 26.

Q. 27. What other mechanical elements shown in Figures 2 and 5 outside of the cup washer would also constitute means for removing excess lubricant?

By Mr. Hansmann: The question is objected to as suggesting an answer.

By Mr. Kalish: I will let the question stand and ask the witness to answer that.

A. The spring 27 which presses upon the cup washer 26, to which I should have referred in my last answer.

The term

"apparatus having a part to be lubricated"

forming the first part of claim 8, may comprehend any apparatus having a part to be lubricated such as journals

of an engine shaft, bearings of a grindstone, or in fact any piece of machinery where it is desirable to reduce the friction of the bearing.

Gullborg Patent No. 1,307,734 in suit is offered in evidence as Defendant's Exhibit No. 1.

Mr. Gibson was handed a piece of apparatus and stated that this apparatus consists of a container for holding lubricant, in the form of a cylinder having a piston and a plain piston rod and handle, a brush clutch upon the piston rod; the piston rod passing through a cover placed at one end of the cylinder. The piece of apparatus is a "compressor" for lubricating parts of machinery and on the cover of the lubricant receptacle member appear the words: [fol. 205]—"Whiz High Pressure Grease Gun No. 20, R. M. Hollingshead Co., Camden, N. J."

This apparatus consists mainly of a grease receptacle, a lever piston pump, a check valve, a flexible hose and the coupler on the end of the hose.

The receptacle is in the form of a cylinder having cylinder covers, through one of which a piston rod projects having a piston on its end within the cylinder. At the other end of that cylinder and within the cover of that end, is a piston type force pump having a hand lever for its operation, and on the discharge end of that force pump appears a check valve, the operation of the pump as a whole being that the pump piston operated by the hand lever will draw grease or lubricant from the receptacle and discharge it past the check valve, this check valve being essential to the operation of the lever pump which would be incapable of operation without that check valve. The piston and rod are a following-up device to aid in furnishing the supply of grease to the lever pump piston. The pressure developed by this pump is produced by the operation of the hand lever piston.

The pump would not operate without that check valve on its discharge end. It would be simply incapable of operation without it because that small pump piston depends for its supply of grease upon the closure of the discharge orifice. If that discharge orifice were not automatically closed by a check valve during the retracting motion of the piston, the charging motion of the piston, there would be no movement of lubricant grease from the receptacle to the cylinder of the hand lever pump. Con-

sequently, that pump would be incapable of delivering grease at the desired pressure.

If the check valve were removed and the pump piston operated, then, upon the charging stroke, that is, upon the withdrawal of the piston outwardly from its cylinder, there would be no vacuum created within the pump cylinder because that vacuum would be satisfied by the ingress of air, grease, or what not, through the passage which should be occupied and closed by the check valve. The check valve having closed that orifice then the vacuum produced by the retraction of the piston will draw the grease from the receptacle into the cylinder, wherefrom it is again ejected past the check valve by the return of the piston.

There is no means whatever for relieving the pressure of the grease in the hose or coupler in this apparatus (marked: —Whiz High Pressure Grease Gun No. 20, R. M. Hollings-[fol. 206] head Co., Camden, N. J.) because the check valve at the discharge orifice of the pump automatically prevents any possibility of relieving the pressure in the hose, and there are no means provided at all for that purpose. It would be impossible to relieve the pressure in the hose and coupler by any operation of retracting the piston of the hand lever pump or the follower piston of the receptacle; any movement of either of those pistons would have no effect whatever upon the pressure in the hose and coupler, due to the presence of the check valve.

The sample of defendant's hand compressor was offered in evidence as Defendant's Exhibit No. 6, and the pump designated as No. 6-A, the flexible metallic hose as No. 6-B, and the bayonet coupler on the end of the hose as No. 6-C; all forming parts of the Defendant's hand compressor, Exhibit No. 6.

Mr. Gibson was handed a flexible metallic hose having on the end of it a bayonet coupler bearing the inscription: —"Alemite, Made in U. S. A., Patented 6-24-19, 1-18-21 and 1-25-21, Pat's. Pdg."

The coupler contains a spring-pressed, slidably mounted cup washer which is adapted to seal against a grease cup to which it may be attached. This coupler, therefore, generally conforms to the coupler construction disclosed in the Gullborg patent in suit insofar as it is provided with the spring-pressed cup washer.

The spring-pressed cup washer in the device last handed to Mr. Gibson, would act as described in Gullborg's patent with regard to its movements insofar as any production of vacuum and cleansing action is concerned.

No self cleansing result or function can be produced by defendant's reciprocating type of pump (Exhibit No. 6-A) having the check valve at its discharge outlet, even if this pump is equipped with the Alemite hose and bayonet coupler instead of defendant's hose and bayonet coupler (Exhibits Nos. 6-B and 6-C) and the pump then operated by attachment in the only manner in which it can be operated upon attachment to an Alemite grease cup or fitting (Defendant's Exhibit No. 5).

Defendant's pump (Defendant's Exhibit No. 6-A) would be incapable of any such vacuum or self cleansing function in the coupler on account of the presence of the check valve [fol. 207] which is essential to the operation of the pump.

If the check valve is removed from defendant's pump (Defendant's Exhibit No. 6-A) the pump will be inoperative and incapable of performing the function of lubricating a bearing.

The defendant's reciprocating type of hand pump (Defendant's Exhibit No. 6-A) equipped with the Alemite hose and Alemite bayonet coupler was then attached by Mr. Gibson to a grease cup affixed to a spring bearing and the pump operated, forcing lubricant into the bearing; the grease cup having been first cleaned exteriorly of all grease, and the Alemite coupler having been first cleansed exteriorly and also interiorly as far as the sealing washer.

The reciprocatory piston of defendant's hand type pump (Defendant's Exhibit 6-A) was then retracted or withdrawn to its outermost limit and the Alemite bayonet coupler uncoupled from the Alemite grease cup.

Upon uncoupling, a considerable quantity of grease excluded from the connection and distributed itself about the grease cup and coupler.

The suctional function of the Gullborg coupler is limited to a type of pump which is so constructed, that the pressure produced by the pump during the act of lubrication can be entirely relieved prior to uncoupling from the grease cup, so that the cup washer of the Gullborg coupler may have an opportunity to function in a manner described in the Gullborg patent.

The Alemite hose and the Alemite coupler were offered in evidence as Defendant's Exhibits Nos. 7B and 7C.

Defendant's large Service "Compressor" was next submitted to Mr. Gibson. This service Compressor bears a label with the inscription:

"Whiz high pressure chassis lubricant, the R. M. Hollingshead Co., Camden, N. J., U. S. A."

this apparatus consists of a tank containing lubricant arranged for the application of air pressure for forcing lubricant out of the tank when required. A shut-off valve on the tank and a hose extending from the valve; a lever piston type on the end of the hose; a flexible metallic hose leading from the pump, and a coupler on the end of the flexible [fol. 208] metallic hose. This apparatus in its entirety is referred to as a "compressor".

This last compressor is generally distinguished in the trade from the defendant's first compressor (Defendant's Exhibit No. 6) as a "Service" or "Garage type compressor", while the other is a portable or hand type compressor.

In the defendant's service compressor the lubricant contained in the tank is forced through the first hose to the lever piston type pump on the end of the hose by the air pressure in the tank, which is mounted at about 100 pounds per square inch.

Without the air pressure the lever piston pump on the end of the first hose would not operate because no lubricant would be supplied to it.

The air is supplied to the tank through a suitable valve similar to the valves used on automobile tires, and in a manner similar to placing air in tires.

The defendant's service compressor was then applied to an Alemite grease cup or fitting fixed to a spring bearing, by the attachment of the coupler of defendant's service compressor to said Alemite grease cup and the compressor was operated, forcing grease into and through the bearing.

Upon uncoupling, a considerable quantity of lubricant was found both on the fitting or grease cup and in and around the coupler.

This lubricating operation was repeated after the grease cup and coupler were cleansed of grease, and upon uncoupling, grease was found again both upon the fitting or grease cup and upon the coupler.

The lubricating operation was again repeated with the fitting or grease cup and coupler cleansed, and prior to disconnecting the coupler from the grease cup, and the piston of the pump or compressor unit was retracted. Upon disconnecting the coupler from the grease cup the grease exuded and continued to exude from the coupler and deposited itself freely on the grease cup and elsewhere.

This last result is due to the fact that in defendant's "service" type "compressor" the lubricant is supplied or fed to the hand lever pump by the air pressure in the tank and the piston of the hand lever pump acts as a valve which shuts off the flow of lubricant from the tank when the piston is fully depressed. When the piston is retracted the air pressure in the tank can force the grease or lubricant [fol. 209] through the pump and through and from the coupler.

There is no means in defendant's "service" type "compressor" for relieving the pressure in the coupler just prior to uncoupling the same from the grease cup. The piston of the pump of the compressor cannot be used for this purpose because as stated before, the withdrawal of the piston permits an unrestricted flow of lubricant from the discharge end of the coupler.

Defendant's Service Compressor was offered in evidence as Defendant's Exhibit No. 8 and the parts thereof separately designated as:

The Pump as 8A;
Flexible Metallic Hose as 8B;
The Bayonet Coupler on the end of the metallic hose 8C;
The lubricant reservoir tank 8D;
The fabric hose connecting the tank with the pump as 8E.

The flexible metallic hose 8B and bayonet coupler 8C of defendant's service compressor (Defendant's Exhibit No. 8) when detached from the pump of said compressor and the Alemite hose and Alemite coupler of defendant's Exhibit No. 7 were substantially in their place by attachment to the pump of defendant's service compressor. The Alemite coupler was clearned and was connected on the Alemite grease cup also cleaned, and the pump operated, forcing the lubricant into the bearing.

Upon disconnecting the Alemite coupler from the Alemite grease cup a considerable amount of grease adhered to the grease cup and coupler.

The reason why there was a free exudation of grease upon uncoupling the Alemite coupler of the Gullborg construction from the Alemite grease cup, and why the grease was not removed from the grease cup or cleansed as mentioned in the Gullborg specification, is because the vacuum produced by the cup washer of the Gullborg-Alemite coupler is not sufficient to offset the pressure within the conduit.

There is no means in his apparatus, even when provided with the Gullborg coupler to relieve the pressure and of producing a vacuum.

The Gullborg coupler construction, such as the Alemite coupler, would not be capable of producing the function and result ascribed to it by Gullborg with a pump and [fol. 210] equipment of the type exemplified by defendant's Exhibit No. 8-A, for the reason hereinabove stated.

Screw type of pump bearing the inscription:

"Alemite lubricator, manufactured by the Bassick Mfg. Co. Chicago, Ill. Pat'd 6-10-19; 6-24-19; 2-26-24, Pats. Pend."

was handed to Mr. Gibson and the Alemite hose and coupler of defendant's Exhibits 6B and 6C were attached to this pump, and Mr. Gibson found that this combination of apparatus was substantially the same as and aptly represents and is practically identical with the portable compressor including the pump, hose and coupler shown in Figure 1 of the Gullborg patent drawing, and contains all the material structural elements of the compressor shown in Figure 1 of the Gullborg patent.

The Alemite screw type of hand pump was offered in evidence as defendant's Exhibit No. 7A.

The Alemite pump, Alemite hose and Alemite coupler were then operated by the attachment to the Alemite grease cup; the coupler and grease cup having been first thoroughly cleaned of grease. The pump was operated until the grease exuded from the bearing to which the grease cup was attached, and upon uncoupling the coupler from the grease cup a great quantity of grease exuded from the coupler and lodged itself all over the fitting or grease cup.

This was due to the pressure existing at the time of uncoupling and the absence of vacuum, since grease could not exude except under pressure.

The lubricating operation with the Alemite pump, Alemite hose and Alemite coupler was repeated until the grease again exuded from the bearing. Thereafter the piston of the pump was retracted by unscrewing the pump handle several turns. The coupler was then readily detachable from the fitting or grease cup without difficulty and a certain amount of grease was found on the fitting.

The object of backing off the piston of the pump before uncoupling is to relieve the pressure from the coupling.

It is impossible in any way to relieve the pressure in either one of the defendant's compressors (Defendant's Exhibit No. 6 and 8), as has been done with the Alemite pump.

In backing off the piston of the Alemite pump there [fol. 211] is no way in which any one can ascertain when the piston has been retracted just sufficiently to relieve the pressure or to establish the normal atmospheric pressure in the pump. That is purely a matter of guess work. When the piston of the pump is retracted beyond the point necessary to relieve the pressure or to reduce the pressure to normal atmospheric pressure, a slight vacuum is produced within the barrel of the pump, also in the hose and coupler.

If the piston of the Alemite pump is retracted and more than is necessary merely to relieve the pressure of the pump to atmospheric pressure there is no way of determining whether the result or condition with the fitting, or coupler when uncoupled is due to the suction produced by the movement of the cup shaped sealing washer within the Alemite coupler or whether it is due to the suction created by the retraction of the piston of the pump.

There is no doubt whatever that the vacuum produced by backing off the piston of the pump is conducive of a very large degree to the cleansing of the fitting.

The defendant's coupler 6C forming part of defendant's Exhibit 6 comprises an inner body which forms the terminal of the house, and contains a washer at its free end which is in fixed relation to said inner body. The inner body has a shoulder upon its outer service forming a spring abutment, and the other end of the spring is engaged by the flange of one part of an outer shell.

This outer shell is formed of two parts arranged to be secured together to form a solid shell, the spring presses against a flange of the shell in such a manner as to move the outer shell upon the inner body of the hose. The outer end of the outer shell is bored out so as to expose the washer which is fixed to the inner body and the shell is furnished with bayonet slots. By the arrangement of flanges, collars and a spring, the outer shell can move longitudinally from the inner body to a limited extent. At the hose end of the coupler is a screw thread adapted for the attachment of the hose.

A drawing was submitted by Mr. Gibson who stated that it correctly represents the construction of the defendant's coupler (Defendant's Exhibit No. 6C).

The drawing was identified and was offered in evidence as Defendant's Exhibit No. 9.

[fol. 212] To demonstrate the existence or non-existence of a slight degree of vacuum in the Gullborg coupler construction during the act of uncoupling the same from the grease cup, Mr. Gibson used the Alemite pump of Defendant's Exhibit No. 7-A and an Alemite hose and bayonet coupler identical with the Alemite hose and coupler of Defendant's Exhibit Nos. 7-B and 7-C respectively; the coupler, however, having a shut-off valve and nozzle inserted into the shell thereof adapted to receive a rubber hose. The other end of the rubber hose was attached to a U-tube or manometer containing water, for the purpose of showing delicate variations in pressure conditions. By this means a clear and continuous passage was provided from the interior of the Alemite coupler back of or behind the cup-shaped sealing gasket thereof and the indicating tube of the manometer, so that any vacuum or change of pressure or change of volume produced in the coupler during the uncoupling thereof from a grease cup will be indicated by movement of the column of water in the manometer tube.

Since the pressure of one pound per square inch on the surface of the water in the manometer tube will move the column of water a distance of about two feet, the indication of the manometer is very accurate and delicate.

In order to ascertain whether there was a clear passageway from within the Alemite coupler behind the cup-shaped washer thereof to the manometer, Mr. Gibson blew gently

upon the discharge end of the coupler and the change of the water level in the manometer of between ¼" and ½" or more indicated a clear passage from coupler to manometer.

Upon attaching the coupler to the grease cup (which was used in the earlier demonstrations) a slight degree of pressure was indicated by a quarter of an inch difference in level of the water columns in the manometer.

The manometer was then restored to its normal condition by opening an air vent provided for that purpose and the air vent was again closed.

The Alemite coupler was then uncoupled from the grease cup and a vacuum was indicated in the manometer by a three-eighth inch difference in level of the water columns.

The above experiment was repeated several times and in each case upon uncoupling the Alemite coupler from the grease cup a slight amount of vacuum was indicated by [fol. 213] the manometer by a variation of the level of the water approximately three-eights of an inch.

When the Gullborg apparatus as disclosed in the drawing and specification of the Gullborg patent is used merely as directed in the Gullborg patent, there is no practical vacuum present in the operation of the Gullborg coupler.

When the operation of lubrication is carried out as specified in the Gullborg patent there is necessarily a condition of high pressure within the body of the lubricant in the apparatus throughout, which condition of high pressure completely and entirely offsets and nullifies any effort that might be made by the Gullborg cup washer movement tending to the production of the theoretical cleansing vacuum.

A mechanical drawing was then submitted to the witness who identified it as a correct and clear representation of the apparatus which was used in performing the vacuum tests, and who stated that the coupler used in these tests is identical in construction with the Gullborg-Alemite coupler of Defendant's Exhibit No. 7C with the only addition of a stopcock inserted into the shell of the coupler for the purpose of demonstration, to provide a passage from the coupler to the hose of the manometer.

Figure 2 of the drawing, representing vacuum testing apparatus, is a true, correct and clear mechanical drawing of the second testing coupler and the stopcock attachment.

The drawing of the vacuum testing apparatus was offered in evidence as Defendant''s Exhibit No. 10.

The previous vacuum tests were then repeated, using the Alemite hand pump and a test coupler identical in construction with the coupler of Defendant's Exhibit No. 6-C having a stopcock inserted into the coupler to provide a passageway from the interior thereof to the manometer. The test coupler was then again tested for clear passage from the interior of the coupler to the water in the manometer tube by blowing gently upon the orifice of the coupler, as was done when testing the Alemite coupler.

The coupler was now coupled onto and uncoupled from an Alemite grease cup without any change in the water level of the manometer either during coupling or uncoupling, or during the whole operation. This was repeated four times without any indication of change of pressure. [fol. 214] The test coupler was then completely uncoupled from the grease cup and in order to prove the existence of a passage from within the coupler to the manometer and the capability of the manometer to register any change of pressure within the body of the coupler, Mr. Gibson blew gently upon the coupler with the result that the water in the manometer tube moved about ¼" to ⅜".

The foregoing tests with defendant's coupler were then repeated, using defendant's' hand pump of Defendant's Exhibit No. 6-A, with the same result that no change of pressure within defendant's coupler was indicated at any time. There is absolutely no possibility of production of a vacuum in this coupler of defendant's under any conditions, either during the act of uncoupling or otherwise, inasmuch as there is no possibility in the construction of this coupler for any change of volume in the conduit of which it forms a part.

The test coupler of defendant's coupler construction used in the last test was offered in evidence as Defendant's Exhibit No. 11.

A sealing gasket or member of defendant's coupler illustrated in the drawing of Defendant's Exhibit No. 9 is rigidly mounted and immovably carried by the member 2.

In the United States Patent to Barcus No. 1,117,762, there is disclosed a coupling of the bayonet type for coupling two

portions of a hose or conduit together, in pressure-tight relation.

Q. 110. Will you please state now whether there is disclosed in this patent to Barcus a male coupling member having bayonet projections or lugs on the side thereof?

A. There is.

Q. 111. Will you please state whether there is disclosed in this patent a female coupling member having mounted in the interior bore thereof a spring-pressed and slidably mounted cup shaped sealing gasket or washer?

By Mr. Hansmann: I object to the question as indicating the desired answer, putting the answer in the mouth of the witness.

Q. 112. Will you please state whether the cup shaped washer 10, shown in Figures 1 and 2 of the Barcus drawing, is so designed and constructed and is so related to the cou-
[fol. 215] pler that it will reciprocate back and forth when the coupler is coupled or uncoupled?

By Mr. Hansmann: I object to the question as indicating the desired answer, putting the answer in the mouth of the witness.

A. A cup shaped washer 10 and 10′, those numbers being allocated to two portions of the cup shaped washer, do operate in the manner you speak of, under the influence of the spring.

Q. 113. Do you find in the Barcus coupler as portrayed by the drawings of the Barcus Patent, each and every one of the elements of the Gullborg coupler, shown particularly in Figure 2 of the Gullborg Patent in suit?

By Mr. Hansmann: Same objection.

A. I find a spring-pressed cup washer arranged to reciprocate within the bore of a coupler. I do.

In the Barcus coupler there is found a coupler body having an enlarged bore containing a spring-pressed, cup-shaped washer and bayonet slots for connection to a fitting or a male part of the coupling. In the Barcus coupler there is also found a shoulder identified by the numeral 1b which,

like the shoulder 25 within the Gullborg coupler, limits the movement of the cup shaped washer.

United States Patent to Barcus No. 1,117,762 was offered in evidence as Defendant's Exhibit No. 12.

In the Barcus sealing device there is a spring pressing upon an annulus formed of two parts threaded together, holding between these threaded portions a cup washer, and containing on the face opposite to that occupied by the cup washer, an annulus washer, the whole of this sealing device being arranged to reciprocate within the bore, and seal against the bore and against the face of the male portion of the coupler; this reciprocation occurring when the two portions of the coupler are engaged or disengaged. The Barcus sealing device contains the spring and cup washer of the Gullborg sealing device and in addition, has those parts which I have described as holding the cup washer and also the annular washer.

A physical reproduction of the Barcus patent coupler was then identified by Mr. Gibson as being a true and correct mechanical reproduction in all material respects and of substantially the same dimensions and proportions as shown in the patent drawing.

The physical reproduction of the Barcus patent coupler [fol. 216] was then offered in evidence as Defendant's Exhibit No. 13.

The Barcus exhibit coupler was then taken apart by Mr. Gibson and all those elements thereof not found in the Gullborg patent coupler were removed and the coupler reassembled without those parts.

The Barcus coupler so deleted and having left within it a spring and a cup shaped washer forming a reciprocal seal between the male and female portions of the coupler was perfectly operative and would work satisfactorily as a bayonet joint coupler for a high pressure fluid conduit.

The three parts removed from the Barcus exhibit coupler are the gasket holding shell 5 in Figure 2 of the Barcus drawing, a threaded washer marked 16 in Figure 2, and a washer marked 7 in Figure 2 of the Barcus drawing. The Barcus coupler thus deleted embodies all the structural elements of the Gullborg patent coupler in suit, and these elements bear the same relation to each other as the corresponding elements of the Gullborg coupler.

A second physical reproduction of the Barcus coupler was then submitted to the witness who stated that it too contained all the material structural details of the Barcus patent coupler.

The only difference between the first Barcus exhibit coupler (Defendant's Exhibit No. 13) and the last Barcus Exhibit coupler is in the matter of size of the parts only, otherwise the device is identical.

The reduced Barcus exhibit coupler was then offered in evidence as Defendant's Exhibit No. 14.

The reduced Barcus exhibit coupler (Defendant's Exhibit No. 14) was then attached to the Gullborg-Alemite grease cup or pin fitting (Defendant's Exhibit No. 5).

The reduced Barcus coupler will function perfectly as a coupler and sealing device for a high-pressure fluid conduit, attached to the Alemite grease cup or fitting.

It could be used entirely satisfactorily with any one of the several pumps and hose (heretofore used) for forcing lubricant into the Alemite grease cup or fitting and through the fitting into the bearing.

Mr. Gibson then stated that he had a great deal of experience in the operation of machine tools and the making of mechanical machine parts and in the actual use of the machine tools in ordinary machine tooling and manufacturing processes, and that if a copy of the Barcus Patent were [fol. 217] given to any ordinary machinist, that machinist, without any further assistance could unquestionably build this second or reduced Barcus coupler if he were asked to do so, so as to fit a particular male coupling member such as the Alemite grease cup or fitting (Exhibit No. 5). Any ordinary machinist would be able to adapt the Barcus coupler as shown in the drawing, to any size male fitting.

It would be within the scope or capacity of any machinist or one skilled in reading drawings, and the mechanical arts, to reproduce the Barcus coupler following the Barcus patent, to any size, dimension or proportion specified.

A mechanical drawing was then submitted to the witness who identified it as correctly and clearly representing the construction, both as to elements as well as to size and proportion of the second Barcus or small Barcus coupler of Exhibit No. 14, and in the left hand view there is correctly represented both as to mechanical elements and as to proportion, the Alemite Fitting, Exhibit No. 5.

The mechanical drawing representing the reduced Barcus Exhibit Coupling was introduced in evidence as Defendant's Exhibit No. 15.

The Stedman Patent No. 456,295 discloses in the drawing and specification, a pipe, hose or conduit coupling of the bayonet type.

A device was submitted to the witness who identified it as a fair mechanical reproduction of the female coupling member shown in Figure 5 of the Stedman patent drawing and stated that it embodies all the material structural details of this female coupling member shown in Figure 5.

There is a difference in the mechanical reproduction of this Stedman female coupler and the coupler shown in Figure 5, in the use of two bayonet slots instead of one in the shell of the coupler and there is a difference of proportion in the projection of the tubular gasket-carrying member referred to in the Stedman drawing as **a**, this portion of the tubular gasket-carrying member **a** being shortened and reduced in diameter in the physical Exhibit Coupler.

The physical reproduction of the Stedman coupling member was introduced in evidence as Defendant's Exhibit No. 16.

The exhibit coupler made substantially in conformity with the Stedman patent was applied by the witness to the [fol. 218] Gullborg-Alemite grease cup or fitting (Exhibit No. 5), who then stated that it operates therewith as a satisfactory coupling.

Any ordinary machinist, if given a copy of this Stedman patent could readily make the exhibit coupler according to the Stedman disclosure so as properly to co-operate with the particular male coupling member comprising the Alemite grease cup or nipple, Exhibit No. 5. The production of such a coupler according to the Stedman disclosure, to fit onto that particular male coupling member here shown as a grease cup, would not involve anything beyond mere mechanical skill of the average machinist.

A copy of the U. S. Patent No. 456,295 to Stedman was introduced in evidence as Defendant's Exhibit No. 17.

A device was then submitted to the witness who identified it as correct duplicate in section of the Defendant's Coupler of Exhibit 6-C.

The sectional duplicate of the Defendant's Coupler was introduced in evidence as Exhibit 6-C-C.

The functional parts of the coupler of the drawing of the Stedman Patent and the Defendant's coupler in suit, Defendant's Exhibit No. 9, are alike. In each coupler there is a central tubular gasket supporting member, an external bayonet slotted and inwardly flanged shell, slidable upon the tubular member first referred to. In each device there is a spring enabling the outer shell to slide over the inner tubular member, for the purpose of engaging the lugs of a male bayonet coupling part, and they both in the same manner serve the same purpose of coupling two parts of the conduit together.

The difference in detail between these couplers are first, that the outer bayonet slotted coupling sleeve is formed of one piece of material in the Stedman patent drawing but of two pieces of material screw-threaded together in the defendant's coupler, Exhibit No. 9. The inner tubular gasket-supporting member of the Stedman Patent drawing consists of one piece of material, whereas in the Exhibit No. 9 it consists of three parts; one being the tubular gasket-supporting member upon which the gasket is placed, and another outer tube rigidly affixed to the first tubular gasket-supporting member through the end connecting piece which also forms the connection with the hose. The extension of the inner tubular gasket-supporting member of the Stedman patent drawing is not present in the Exhibit [fol. 219] No. 9, but in substitution therefor the projection of the outer tube of the gasket-supporting member serves a similar purpose, but outwardly in regard to the male coupling member rather than inwardly.

The defendant's coupler shown in the drawing Exhibit No. 9 embodies in general, all the material structural and functional features of the Stedman patent coupler. It would function; it cannot help but function in exactly the same way as the Stedman coupler shown in his patent drawing.

The British patent No. 21,893 of 1906 issued to Alley discloses a screw type of hand pump for forcing lubricant grease; that pump having a handle, a piston rod threaded, and a piston. At the orifice of the pump there is provided a check valve so arranged that when the pump is not con-

nected to other parts, that check valve forms a closure against the egress of lubricant from the pump.

The apparatus disclosed in the Alley patent is a compressor of the hand screw pump type, having a passage from the compressor to a female coupler and a male part of the coupling device, wherein the two parts of the coupling device are coupled by means of a screw thread; the male part of the coupling device is provided with a spring-pressed check valve permitting passage of lubricant from the pump to the male grease cup fitting part of the coupling. In the specfication of that patent it is very clearly stated that this male part of the coupling or grease cup fitting may be provided, in its relation to the female part of the coupling, with a bayonet or like catch.

The male part of the coupling or grease cup fitting would be fastened to, or screwed into the conduit or passage leading to the bearing of some part of an apparatus which requires to be lubricated and it is Alley's intention to use a number of such male grease cup fittings at such parts on a machine or apparatus which has parts to be lubricated, and Alley would use his compressor complete, by moving it from one such grease cup fitting to another such grease cup fitting, as required by the demands for lubrication of the parts of the apparatus.

The male coupling member of Alley, or grease cup functions in exactly the same manner as the Alemite grease cup or fitting which has been submitted as Exhibit No. 5. It serves to receive lubricant forced into it under pressure and it is so arranged with its check valve that lubricant having [fol. 220] been forced thereinto past the check valve, cannot exude therefrom after the removal of the compressor.

Q. 149. Would you say that Alley therefore discloses broadly a combination of a valved lubricant receptacle or grease cup stationarily affixed to a bearing, and a portable or perambulatory lubricant-dispensing compressor comprising a pump and a coupler, there being complementary means on the stationary grease cup and on the coupler or nozzle of the portable compressor for effecting a temporary and detachable fluid-tight connection between the two?

A. He does.

By Mr. Hansmann: I object to that question as putting in the mouth of the witness the words that defendant's attorney wishes to appear in the deposition.

The bayonet catch referred to by Alley on pages 2 and 3 of the specification of the Alley Patent:

"It is obvious that the means for securing the pump upon the lubricator may be modified—for example, instead of a course pitch screw, a bayonet or like catch may be used and that the form of valve used in the nozzle may be varied."

is the common bayonet catch which is shown in the patents to Barcus and Stedman, already referred to, and which has been used for many, many years prior to Alley, and at his time was in fact a common method of detachably connecting two rods or two parts of a conduit together, for the purpose of making a rigid connection or a pressure-tight joint.

The Stedman coupling (U. S. patent to Stedman No. 456,295, issued July 21, 1891) is aptly illustrative of one form of such a bayonet catch referred to in the specification of Alley.

The British patent to Alley No. 21,893 of 1906 was introduced in evidence as Defendant's Exhibit No. 18.

The Barcus patent already in evidence and the Brown patent No. 1,141,101 are both examples of bayonet type of couplers or bayonet catch which would exemplify the bayonet catch referred to in the specification of the Alley Patent, as a substitute for the screw connection.

[fol. 221] A photostatic copy of a drawing was submitted to the witness and identified by him as showing in the two figures on the extreme left, correct reproductions of the drawing of the Alley patent, with the compressor shown detached in one figure and shown attached in the other. The two figures to the extreme right of that drawing likewise very properly represent the bayonet catch connection for the two parts of the coupler of the Alley lubricating device referred to in the specification.

The drawing so identified, was introduced in evidence as Defendant's Exhibit No. 19.

A device was submitted to the witness who identified it as being quite obviously a practical Chinese copy of the drawing of the Alley 1906 British patent, with the variation of the coupling arrangement carried out in accordance with the very clear and unmistakable instruction of the inventor Alley, where he says in his specification beginning at line 49 of page 1:

"it is obvious that the means for securing the pump upon the lubricator may be modified—for example, instead of a course pitch screw a bayonet or like catch may be used."

It is quite clear that in this exhibit that suggestion has been followed and the bayonet or like catch has been used.

Two other devices were submitted to the witness who identified them as being very evidently the female and male parts of the coupling of Alley's British patent of 1906 and as being adaptable for use with the pump last identified, and when so adapted or connected to that pump, in substitution for the corresponding parts incorporating Alley's bayonet catch coupling, then the whole device becomes a Chinese copy of the drawing of the Alley 1906 patent in every particular.

The reproduction of the Alley devices were introduced in evidence. The Alley devices were designated collectively as Defendant's Exhibit No. 20, and the pump separately designated as No. 20-A; the screw type of coupler of Alley as No. 20-B; the bayonet type of coupler of Alley as No. 20-C; the screw type of grease cup or lubricator of Alley as No. 20-D, and the bayonet type of grease cup or lubicator of Alley as No. 20-C.

The Alley compressor comprising the Alley pump Exhibit No. 20-A and the Alley bayonet type coupler or nozzle Exhibit No. 20-C were then attached or connected onto the [fol. 222] Gullborg-Allemite grease cup or pin fitting, Defendant's Exhibit No. 5, by the witness who stated that the Alley compressor cooperates perfectly with the Alemite grease cup fitting and that the whole device would operate as a compressor for lubricating bearings, in a satisfactory manner.

When the Alley compressor of Defendant's Exhibit No. 20-A is connected onto the Alemite grease cup or pin fitting, said Alley bayonet catch coupler co-acts with the ends of the pin forming part of said Alemite grease cup. It co-acts with the ends of said pin in the usual manner of a bayonet catch.

A photostatic reproduction of page 258 of the French journal "Omnia" of April 25, 1914 and a translation of certain part of the text was submitted to the witness, who examined the same and stated that in the first two columns

of page 258 of the French publication "Omnia" appear three illustrations; that in the center part of the columns marked 1, is a clear reproduction or photograph of a compressor for use in lubricating bearings consisting of the usual parts—a hand screw pump, a hose and a coupler. In this illustration also, a bearing is shown, evidently for the purpose of illustrating the act of lubrication. In the picture numbered 2, there is shown an enlargement of the coupler portion of the compressor, attached to a portion of hose, an- there is also shown in that picture a fitting or male part of the coupling, either attached to, or forming part of a bearing, and these two parts are evidently capable of being coupled and co-acting with one another, for the purpose of lubricating the bearings. In the illustration near the top of the left hand column, there are shown three sectional views of the details of the female coupler illustrated in the other pictures referred to, and of the grease cup, fitting or male member of the coupling. It is clear that the coupling member is capable of making a pressure-tight joint between itself and the male grease cup fitting coupling member. All the parts illustrated in the pictures are parts of a common compressor for lubricating bearings with grease, under high pressure. Referring to the translation of page 258 of the journal "Omnia", I find that the heading or subject is an instantaneous coupling Seng system for lubricating with a thick grease, and the translation details just how the parts of the compressor which are illustrated in the same columns co-operate, couple and uncouple, and how the operation of the compressor results in the lubrication of the bearing, as desired.

[fol. 223] Seng, in this publication, discloses a valved grease cup. The grease cup is provided with a check valve, spring-pressed against an inwardly flanged seat forming part of the body of the grease cup fitting. Seng's grease cups are illustrated as being screwed into and permanently affixed to the bearing. This publication of Seng discloses a portable lubricant dispensing compressor. This publication of Seng teaches the lubrication of a series of bearings by a common, single and portable lubricant dispensing compressor.

The disclosure of Seng's device in the paper "Omni" is that of a compressor for lubricating bearings or parts of apparatus that may require lubrication, and so also is the

disclosure of Gullborg in his patent. The object of these devices is exactly the same. The means whereby Seng accomplishes these objects, comprise a hand operated screw type of pump with a hose attached to its orifice and on the other end of that hose a female part of a coupling device which is readily attachable and detachable from a male portion of the coupling device, which male portion or grease cup is permanently attached to a bearing, for the purpose of lubricating that bearing. The disclosure of Gullborg, in his patent, comprises exactly the same elements and for the same purpose disclosed in the same manner and used in exactly the same way. For all practical and all theoretical purposes, the device of the disclosure of Seng in "Omnia" and the device of the disclosure in Gullborg's patents serve exactly the same purpose in exactly the same way. The apparatus that may require lubrication in the case of the Seng device would be provided at each of the parts or bearings, or conduits to bearings, with a spring-pressed, check-valved grease cup or fitting forming the male member of the coupling device and upon the occasion of the bearings or parts of that apparatus requiring to be lubricated, the portable compressor of Seng would be applied by means of its female coupler upon the end of its hose, to each and every one of the grease cup fittings—and each of the bearings to which those fittings were related, would be then lubricated by the operation of compressing the grease within the device, by means of the turning of the handle, forcing the screw-threaded piston rod and piston upon the grease contained within the receptacle or pump. The device of Gullborg would be used, applied and operated in exactly the same manner as the device of Seng, as to its parts and as a whole. There is, in fact, no other way nor method nor application, whereby these two devices could be used in [fol. 224] any other manner for the purposes of lubricating the parts of machinery, and that purpose is the only purpose that they have.

There are slight differences in the construction of the two devices—the Seng device disclosed in "Omnia" and the Gullborg device of the Gullborg Patent; though in general the pump of the Gullborg device might have been copied directly from the pump of the Seng device, for they are so similar in appearance and function. The hose of the Gullborg device is so similar in appearance and function that it

might well have been copied from the Seng device. The female coupler of the Gullborg device, while serving the same purpose as the female coupler of the Seng device, has a different mechanical means for connecting it to the male portion the coupler or grease cup fitting, inasmuch as the Gullborg female coupler is provided with a true bayonet slot of ancient form, for the purpose of co-operating with the bayonet lug or pin of the male member of the coupling or grease cup, while the Seng female coupling is provided with three claws or levers which are arranged to engage with a flange projecting from the body of the grease cup fitting, whereby upon engaging the female coupler with the male portion of the coupling, a washer situated within the female coupler will be compressed between the faces of the female and male portions of the coupling, so forming a grease-tight joint against the leakage of lubricant under high pressure and this feature of Seng accomplishes exactly the same object as the sealing cup washer of the Gullborg coupling device, (which, as has already been testified to, consists of a cup washer capable of reciprocating within the bore of the female coupler, under the influence of a spring); the Seng coupling device requiring likewise, the pressure of the hand of the operator in order to accomplish the pressure-tight coupling of the two parts, in exactly the same way as that pressure of the hand is necessary in the case of the Gullborg coupling device.

The grease cup, fittings or male portion of the coupling of the Gullborg patent are intended by the inventor to be rigidly affixed to each and every one of the bearings or parts of the apparatus which may require lubrication, and the Gullborg compressor consisting of pump, hose and female coupler would be applied to each and every one of such grease cup fittings, for the purpose of lubricating each of the bearings to which those fittings were applied, in exactly the same manner as the system or plan of lubrication of Seng.

[fol. 225] The date of this "Omnia" publication is Saturday, 25th of April 1914. Its identification number is 434-137. The number of the page upon which the disclosure of Seng appears is 258.

"Omnia" is a publication devoted mainly to arts and sciences, and one of those which makes a practice of describing, illustrating and disclosing to the public the new

ideas as they are submitted to them, either by the issuance of French patents or by the communication of French engineers, inventors, scientists, etc.

"Omnia" is comparable with the American publications "Automotive Industries" and "Scientific American".

A photostatic copy of the publication "Omnia" was introduced in evidence as Defendant's Exhibit No. 21, and the English translation was introduced as Defendant's Exhibit No. 22, subject, however, to further and appropriate identification of this translation.

A copy of the United States patent to P. B. Laskey and W. Arnold, for a device known as an axle lubricator, No. 242,141 of May 31, 1881, was submitted to the witness.

In the Laskey and Arnold patent, there is provided a series of grease cup fittings permanently affixed to a series of bearings requiring lubrication, and a portable compressor with a coupler or means of attachment of the compressor to any one of the grease cup fittings, the combination of parts being provided for the purpose of lubricating the bearings of whatever apparatus the bearings may form a part of. The various elements of this plan of lubricating bearings are the grease cup fittings which are permanently affixed to the bearings or to a conduit leading to the bearings, and are provided with a spring-pressed check valve for closing the orifice of the fitting against either the loss of lubricant, or the entrance of dirt; a screw thread is upon the outward surface of the body of the fitting. A compressor having an internal screw thread forming part of a coupling is adapted to engage with the external screw thread of the fitting of the bearing. There is a provision, forming part of the coupling of the compressor, for depressing the check valve closure of the fitting during the act of lubrication; a check valve at the orifice of the pump proper to prevent leakage of lubricant from the pump when not in use; a pump cylinder and piston for forcing the lubricant through the fitting and through the conduit and so to the bearing; [fol. 226] and a check valve permitting the ingress of lubricant to the pump. The fitting, described in detail, has exactly the same purpose and functions generally the same way as the grease cut fitting of the Gullborg patent; the compressor is portable, perambulatory and when affixed to the fittings, operates and functions generally in the same

manner as the Gullborg compressor; in fact, each of these devices performs the same service.

The term "grease" is here used in a general way, and the term "lubricant" which would include both the heavy and the lighter lubricants might be better—the matter of the viscosity of the lubricant would have no material influence upon the operation of this device. It could use any common lubricant.

The particular machinery to which Laskey and Arnold's lubricant receptacles are affixed is a wagon of which the illustrated axles form the bearing or part requiring lubrication.

The Laskey and Arnold patent was introduced in evidence as Defendant's Exhibit No. 23.

A copy of the United States patent to Winkley, No. 1,201,414 dated October 17, 1916 was identified by the witness and introduced in evidence as Defendant's Exhibit No. 24.

A copy of the United States patent to Winkley, Reissue No. 14,667 dated June 10, 1919 was identified by the witness and introduced in evidence as Defendant's Exhibit No. 25.

The original Winkley patent No. 1,201,414 discloses a compressor and a fitting or grease cup; and the compressor comprises a pump, hose and coupling.

The object of the Winkley apparatus is the lubrication of the bearings of machinery. That object would be accomplished with the Winkley apparatus by coupling the coupler of the compressor to the grease cup fitting and operating the pump, disconnecting the coupler from the fitting after completing the act of lubrication, and repeating this process on other grease cup fittings of similar character, affixed to other bearings.

The drawings of this original Winkley Patent No. 1,201,414 are signed:

"Frank D. Winkley, by Pond & Wilson, Attorneys."

The drawings of the Winkley Reissue patent No. 14,667 (Exhibit No. 25) are signed:

"Frank D. Winkley, by William, Bradbury & See, Attorneys."

[fol. 227] In the Winkley Reissue patent No. 14,667, there appears in the lower part of the second sheet of drawings,

a drawing of the chassis of an automobile which does not appear at all on any of the drawings of the original Winkley patent No. 1,201,414.

The grease cup or fitting of the two Winkley patents is arranged to be screwed into and therefore permanently affixed to the bearing of the machine requiring lubrication. It is furnished with a spring-pressed check valve, forming a closure at the outer end of the fitting, and there is a flange projecting from the outer end of the body of the fitting. This flange is so formed and proportioned that a portion of the coupler may engage under the surface of this flange. This portion of the coupler which so engages with the fitting flange has the form of a claw and is forked so that the two forks of the coupler will pass on either side of the central body of the fitting when the coupler is engaged thereto, and that forked claw will serve to hold the coupler in operative relation to the fitting. When the coupler is so held, a slidable, cylindrical portion of the coupler which forms a part of the conduit for lubricant and which is provided with a check valve at its orifice, deseatable upon the completion of the coupling operation, is provided with a spring pressing upon its upper surface so as to cause this slidable check valved conduit and to be held forcibly in contact with the outer end of the grease cup fitting, thus providing a seal against the leakage of lubricant under pressure, at the joint between that slidable portion and the grease cup fitting, and to furnish a continuous conduit for the lubricant to the bearing.

The method of operation of this coupler and fitting is to engage the forked claw of the coupler with the flange of the fitting, by sliding the coupler transversely of the axis of the fitting, so raising the slidable, reciprocating conduit end and deseating the check valve therein, thereafter, of course, forcing lubricant therefrom. This coupling may be attached to and detached from any number of such fittings.

A device was submitted to the witness who identified it as a physical embodiment of the grease cup fitting shown in the drawings of the Winkley patent.

This device has a check valve and spring within the grease cup fitting, which spring is for the purpose of effecting a closure at the outward end of the fitting. It has the flange of Winkley's grease cup.

The physical embodiment of the Winkley grease cup [fol. 228] so identified, was introduced in evidence as Defendant's Exhibit No. 26.

Another device was submitted to the witness who identified it as a compressor consisting of a hand screw pump and hose, and a coupler.

The coupler of this last device was attached to the grease cup, Exhibit No. 26, The coupler properly cooperated with the grease cup to connect the two.

On the coupler of this compressor, there is a forked claw which can readily be engaged under the flange of the grease cup fitting, thus affecting a substantial coupling between the two parts. This forked claw coupling means of this coupler is a physical example of the forked claw coupler of the Winkley patent. It appears to contain a gasket or washer which might be capable of sealing the joint between the coupler and the fitting.

Upon removing the interior parts of th-s last "claw" type of coupler, I find that there is a washer having the general appearance of a cup-washer, held in position and pressed upon by a spring in such relation in the orifice of the coupler, that an orifice provided in the center of the disk of the cup washer may co-operate with the orifice of the grease cup fitting and provide a passage for lubricant thereto. Pressure upon the spring is provided by means of a closure cap at the opposite side of the coupler. There is a passage for lubricant provided in one wall of the cylindrical bore of the coupler, within which bore the washer can reciprocate, admitting the lubricant to the space occupied by the washer. This spring-pressed washer is capable of forming a seal with the face of the grease cup fitting when the coupler is attached thereto.

The compressor, including the screw type of pump, a hose and the Winkley clay type of coupler, so identified, were introduced in evidence as Defendant's Exhibit No. 27.

A photostatic copy of a letter relative to the French publication "Omnia" (Defendant's Exhibit 21) was read into the record and introduced in evidence as Defendant's Exhibit 21-B.

[fol. 229] "General Motors Corporation

Detroit, Michigan

October 18, 1927.

Mr. Edward L. Reed, 1165 Reibold Bldg., Dayton, Ohio.

My Dear Mr. Reed:

We are glad to send you a copy of the photostat which you requested from Omnia 9 Annee 434, page 258.

In order to make a copy of the page showing the date, it was necessary to photostat the preceding page. The date is given on this page but not the number of the page. If you were to paste these two sheets together you would have page 257 recto and 258 the left hand page.

I hope this is clear. If there is any question about it, please feel free to write again.

(Signed) Caroline W. Lutz, Librarian, Research Laboratories."

A photostatic copy of drawings and specification of British patent No. 3,028, dated February 24, 1915, to Seng, were submitted to the witness who stated that the specification and drawings disclose a readily attachable and detachable coupling, whereby the one part of the coupling being a grease cup or lubricator or fitting, may be fastened to a bearing to be lubricated, and the other part of the coupling consists of hand operated "claws" or levers for producing a pressure-tight joint between the two parts of the coupling, and those two coupling parts are referred to in the specification as, that they "may be used particularly in the case of forced lubrication with oil or gas. To this end, recourse may be had to a ball lubricator forming obturator and comprising an external flange for securing and fixing the joint, (Figures 1 and 2)". Claim 1 of th-s specification refers particularly to the two parts of the coupling as capable of forming an "instantaneous joint for pipes conveying fluids under pressure, particularly applicable to lubricators."

Both the British Seng patent and the Gullborg patent disclose a readily attachable and detachable coupling device for use in forced lubrication with oil or grease, and the parts of this coupling serve the same purpose as the parts of the Gullborg coupling in the making of such an instan-

[fol. 230] taneous joint as is required in the lubrication of parts of machinery.

The male part of Seng's coupling is a grease cup, lubricator or fitting, designed for fixed attachment to bearings of a machine, and the other part being the female portion of the complete coupling and adapted to readily attach and detach a compressor to and from the male fitting.

Copy of the British Seng patent No. 3,028 of 1915 was introduced in evidence as Defendant's Exhibit No. 29.

A photostatic copy of the French patent issued to Seng No. 468,869, dated July 18, 1914 was submitted to the witness who stated that the drawing of this French Seng patent is a line-for-line reproduction of the drawing of the British Seng patent.

The photostatic copy of the French patent No. 468,869 to Seng, was introduced in evidence as Defendant's Exhibit No. 30.

A photostatic copy of French patent No. 20,083 to Seng (Addition to Seng's French patent No. 468,869) was identified by the witness and introduced in evidence as Defendant's Exhibit No. 31 and a translation of the French patent No. 20,083 (Exhibit No. 31) was introduced in evidence as Defendant's Exhibit No. 32, subject, however, to subsequent identification.

The United States patent to Laskey and Arnold of 1881, the British patent to Alley of 1906, the British and French patents to Seng, and Seng's publication in "Omnia" as well as the original and Reissue U. S. patents to Winkley and the Gullborg patent in suit, all disclose a system or plan of lubrication of bearings of a machine, comprising a permanently affixed grease cup, lubricator or fitting at each bearing, and a portable, perambulatory compressor comprising a pump and a hose and a coupler on the end of the hose for co-acting with the grease cups, lubricators or fittings, so that the compressor as a whole may be moved from bearing fitting to bearing fitting, as described, and each of those bearings to be lubricated by operation of the compressor.

The only real material difference in the disclosures of those prior art patents is in the means used for coupling the

female coupler on the end of the hose to the male grease cup, lubricator or fitting at the bearing. Some do it one way; some do it another.

Each of these prior art patents or publications disclose among other things, a grease cup or a "fitting" provided with a spring-pressed check valve. They each disclose some [fol. 231] portable grease dispensing device, capable of forcing grease under pressure.

In the Laskey system of lubrication, the arrangement for coupling is a screw thread, the female coupling having a female thread and the male coupling having a male thread corresponding. In the Alley system, the Alley drawing shows a screw coupling of the same general type as Laskey and in his specification he directs that a bayonet or like catch may be used for the purpose. In Seng, there is a three claw lever means for coupling the parts together. In the French patent of addition to Seng, there is disclosed a variation of his three claw lever type using ball in place of the claws for the same purpose; the original Seng French and British patents being identical; the Winkley coupling is of a forked claw type; and the Gullborg coupling is of the bayonet type.

A copy of U. S. Patent to E. H. Sholder, No. 242,564, dated June 7, 1881 was submitted to the witness who stated that it discloses a hose coupling of the bayonet catch type.

The copy of U. S. Patent to Sholder No,. 242,564 was introduced in evidence as Defendant's Exhibit No. 33.

A copy of U. S. patent to T. F. Lees, for a coupling, pipe and hose, No. 610,359, dated September 6, 1898 was identified by the witness, who stated that it discloses a bayonet joint coupling for two parts of the conduit.

The copy of U. S. Patent to Lees No. 610,359, September 6, 1898, was then introduced in evidence as Defendant's Exhibit No. 34.

A photostatic copy of a drawing was submitted to the witness who stated that it represents disclosures of the French and British patents of Seng and the French publication in Omnia, also of Seng, there being used in the case of this photostat Seng's ball claw type of coupler.

The photostatic copy of the drawing of Seng's devices, so identified, was introduced in evidence as Defendant's Exhibit No. 35.

A copy of a U. S. patent issued to A. V. Gullborg, for lubricating apparatus, No. 1,307,733 of June 24, 1919 was submitted to the witness who stated that in this Gullborg patent there is disclosed, in the drawing, a compressor having a female coupler and a grease cup, lubricator or fitting, for attachment to the bearings of machinery, it being adapted to couple with the coupler of the compressor. [fol. 232] The Alemite grease cup or "fitting" heretofore submitted as Defendant's Exhibit No. 5 is a full and complete physical embodiment of the device shown in Figure 2 of this Gullborg patent.

Claim 3 of this Gullborg patent (No. 1,307,733) is clearly readable upon this Alemite fitting (Defendant's Exhibit No. 5). Both claims 4 and 5 (Gullborg patent 1,307,733) also read on that Bassick-Alemite grease cup or "fitting".

A copy of U. S. patent to Gullborg No. 1,307,733 of June 24, 1919 was introduced in evidence as Defendant's Exhibit No. 36.

The defendant's hand compressor including the defendant's pump, Exhibit No. 6-A, hose, Exhibit No. 6-B and coupler, Exhibit No. 6-C, was attached to the Bassick-Alemite grease cup or pin fitting (Defendant's Exhibit No. 5), in an operative manner.

The witness, after reading Claim 1 of the Gullborg patent in suit, stated that the elements of this claim are:

"a hollow coupling member having a pin projecting from one side thereof and a spring pressed closure."

This element is present in the assemblage of apparatus in the form of the Alemite grease cup, lubricator or fitting.

"a pump having a flexible conduit connected with the outlet thereof."

This element is present in the form of the pump and flexible hose, Defendant's Exhibits 6-A and 6-B.

The next element is

"a second hollow coupling member secured to the other end of said conduit for receiving the closed end of the said first named coupling member and provided with a bayonet slot for receiving said pin, the transverse portion of said slot being inclined from the longitudinal portion thereof toward the outer end of the coupling member, the bore of

said coupling member being enlarged to provide a shoulder, a perforated sealing disk slidably mounted in the enlarged portion of said bore, and a spring confined between the ends of said conduit and said disk for urging said disk against said first named coupling member."

[fol. 233] This main element of the claim is not present in the assembly of Defendant's Exhibit No. 6 comprising 6-A, 6-B and 6-C, to the Alemite grease cup Defendant's Exhibit No. 5.

The fourth element of Claim 1, that is, that coupler element is not present because, first, the transverse portion of said slot, being the bayonet slot referred to, is not

"inclined from the longitudinal portion of the slot toward the outer end of the coupling member;"

because the bore of the coupling member is not

"enlarged to provide a shoulder with a perforated sealing disk slidably mounted in the enlarged portion of the bore"

and there is no

"Spring confined between the ends of the conduit and the disk for urging the disk against the first coupling member."

Those specific constructions of this main element of the claim are not present in the defendant's coupler, Exhibit 6-C.

The function of those structural features is, as explained in the Gullborg patent specification, to furnish or provide, or produce a grease cleansing vacuum within the coupler during the process of disengagement of this coupler part from the grease cup, lubricator or fitting.

Upon examination of the sectional sample of defendant's coupler, Defendant's Exhibit No. 6-C-C, the witness stated that he does not find any elements in defendant's coupler Exhibit No. 6-C or No. 6-C-C, which might be considered equivalent to the elements in this Gullborg structure *structure* of coupling. There are no elements in this coupling which could possibly produce the functional operation of the elements of the Gullborg coupling.

The spring of the defendant's coupler does not and cannot function in the manner of the spring of the Gullborg coupler, nor can it by any possibility do so, for it is not confined between the ends of the conduit and any

sealing disk. It has no influence whatever upon the urging of any sealing disk against any coupling member and it has no relation to any sealing disk slidably mounted in the enlarged portion of the bore of the coupling member. It [fol. 234] merely serves to retain the coupler and its parts, in all respects, in fixed relation to the grease cup, lubricator or fitting.

Considering Claim 2 of the Gullborg patent in suit, the element

"a perforated sealing disk mounted to reciprocate in the bore of said coupling member, means for yieldingly urging said sealing disk against the closed end of said first named coupling member, and means for limiting the movement of said sealing disk in the direction of said second coupling member"

are all absent from the defendant's coupler (Defendant's Exhibit 6-C).

In claim 3, the

"perforated sealing disk"

and the elements mentioned after the reference to that sealing disk in that claim, are all absent from the defendant's coupler.

All the elements referred to in Claim 4 including and after the words:

"perforated sealing disk"

are absent from defendant's coupler.

All the elements of Claim 5, referred to by the words:

"of a hollow coupling member"

and by the following words of that claim, are not present in the defendant's coupler.

In Claim 6, all the elements referred to in the wording beginning:

"of a coupling member"

are not present in defendant's coupler.

In Claim 7, all the elements referred to by the words

"of a coupling member"

and the following wording, are not present in defendant's coupler.

In Claim 8, the "means" there provided "for removing excess lubricant" from the adjacent ends of coupling members, theretofore referred to, when said coupling [fol. 235] members are uncoupled, is not present in defendant's coupler.

The elements in each of claims 1 to 8 inclusive which are not present in the defendant's coupler are substantially the same elements.

The function or result which Gullborg ascribes to these particular structural elements in each of claims 1 to 8 inclusive which are not present in defendants coupler, is the supposed production of a cleansing vacuum within the coupling during the act of uncoupling, as referred to in his specification.

The witness then stated that the tests conducted by him during his preceding testimony conclusively support his statement. Though those tests were conducted in the most careful manner and with the most delicate apparatus, for the purpose of indicating a cleansing vacuum or any vacuum if such were present, yet there was a clear indication that no such vacuum was present in defendant's coupler upon uncoupling or at any other time.

The witness then attached defendant's compressor, Exhibit No. 6, to the Alemite-Gullborg grease cup or fitting, and stated that Claim 15, in the light of the drawings and specification of the Gullborg patent, does not read upon the apparatus thus coupled together because the Gullborg patent drawings and specification very clearly instruct that the female coupling member contains a cleansing vacuum producing element and such cleansing vacuum producing element is not present in this combination of apparatus.

Reading the words of Claim 15, as if they appeared in the air, unrelated to anything else, it would be possible to read the wording of that claim upon the combination of parts here assembled. Without relation to any other construction or disclosure than is contained in the words of Claim 15, there is found an element of

"a grease cup comprising a tubular member having a closure seat, a closure, a pin extending through said tubular member and from both sides thereof, and a spring confined between said pin and closure, and tending to hold said closure on its seat."

That element is present in this combination of apparatus in the form of the grease cup or fitting, and the element of

"grease pump having a discharge conduit"

in that claim is here in the form of the defendant's pump and hose, and another element in the claim; namely,

[fol. 236] "means coacting with the end of said pin, for detachably connecting the discharge end of said conduit with said grease cup;"

and that broad statement of a device is here present in the coupler, defendant's Exhibit No. 6-C.

Claim 15, in reciting the Gullborg-Alemite grease cup and a pump "having a discharge conduit and means coacting with the ends of said pin for detachably connecting the conduit with the grease cup" is not limited to any particular form of pump conduit and coupling means. That wording embraces any pump, any discharge conduit and any coupler.

The Alley exhibit device comprising Alley's pump and bayonet catch type of coupler or nozzle (in evidence as Defendant's Exhibits Nos. 20-A and 20-C) were attached by the witness to plaintiff's Gullborg-Alemite grease cup or "pin fitting" in evidence as Defendant's Exhibit No. 5.

Claim 15, when considered apart from the specification and drawings of the Gullborg patent in suit, is aptly and fully descriptive of this combination or assemblage of apparatus, to wit: the Gullborg-Alemite grease cup.

Claim 15 would be equally definitive of the combination of the plaintiff's Gullborg grease cup with Alley's grease pump, even though the bayonet catch were modified according to, or in conformity with the disclosures of any one of the several prior art patents in evidence showing bayonet conduit couplers.

Claim 15, considered in the light of the specification and drawings of the Gullborg patent in suit, would certainly not be readable upon the Alley device when connected to the plaintiff's Gullborg grease cup in evidence, because in this combination of the Alley grease pump and bayonet coupling for attaching that Alley compressor to the Gullborg grease cup fitting, there is no apparatus for producing the cleansing vacuum function of the Gullborg patent, as disclosed in his drawing and enlarged upon at length in his specification.

If merely its abstract language were considered, Claim 15 would be definitive of a combination of plaintiff's Gullborg grease cup, (in evidence) and the lubricant compressor of Winkley, if in place of Winkley's claw type of conduit coupler any one of the several prior art bayonet type of couplers were substituted.

The substitution of a bayonet coupler or catch of Alley, Stedman, Barcus or Sholder or Lees, in place of the claw type of coupler on the Winkley lubricant grease compressor [fol. 237] would not involve any unusual skill. It would be a matter of choice with a good mechanic and he would apply anyone of those, as he chose, if he wished to use a bayonet type and he would find no difficulty in so doing.

To build any one of the several bayonet type of couplers, as for instance, the bayonet conduit coupler of Barcus, Stedman, Lees or Sholder, of a particular size and of particular proportions to fit onto the Gullborg grease cup, in evidence as Defendant's Exhibit No. 5, would be nothing more than mere skill of a mechanic or machinist. Such an operation would be considered in the day's work of a competent mechanic.

A copy of United States patent to one H. J. Murphy, for Pressure Lubricating System and Apparatus, No. 1,637,326, dated July 26, 1927 was submitted to, and identified by the witness.

This patent discloses a compressor and grease cup fitting, forming a system or plan for lubricating bearings of machinery.

A piece of apparatus was submitted to the witness who, upon examination, stated that it is a physical reproduction of the compressor of the patent to Murphy.

The Murphy patent No. 1,637,326 was introduced in evidence as defendant's Exhibit No. 37.

The physical embodiment of the Murphy compressor was introduced in evidence as Defendant's Exhibit No. 38.

Another device was submitted to the witness, who stated that it is a physical embodiment of the grease cup or fitting of the patent to Murphy.

The grease cup of the Murphy patent was introduced in evidence as Defendant's Exhibit No. 39.

Another device was submitted to the witness who stated that it is a grease cup, lubricator or fitting having a spring pressed closure or check valve in the internal passage thereof and lugs or pins projecting from the body, evidently for the purpose of forming part of the bayonet catch or joint. This device would function satisfactorily in every respect as a bayonet type of conduit coupling member, serving as a lubricant receptacle or grease cup.

The device so identified was introduced in evidence as defendant's Exhibit No. 40.

Another device was submitted to the witness, who identified it as substantially a duplicate of the previous device, cut open or sectioned.

[fol. 238] This last device was introduced in evidence as Defendant's Exhibit No. 40-A.

If, in place of the defendant's coupler, Exhibit No. 6-C, another coupler having a spring-pressed and slidably mounted cup-shaped washer similar to Gullborg's construction were substituted on defendant's compressor, Exhibit No. 6, claims 1 to 8 of the Gullborg patent would not read upon the reciprocatory pump, hose and such other coupler, when combined with the Gullborg grease cup, because this assemblage of apparatus is not in accordance with the disclosure of the Gullborg patent, particularly in the drawings and the specification, in that it would be physically impossible to develop or produce any cleansing vacuum during the use of the apparatus.

Another device was submitted to the witness, who stated that it is a hose or conduit and on its one end is a coupling of the bayonet catch type, and contained within the coupling is a spring-pressed cup washer. This spring-pressed, reciprocatory cup-washer conforms to the device referred to in the Gullborg claims 1 to 8 inclusive as intended for the purpose of producing a cleansing vacuum.

The device so identified was introduced in evidence as Defendant's Exhibit No. 41.

The hose and coupler of Exhibit No. 41 were attached to the defendant's pump and the coupler of this hose was attached to the Gullborg-Alemite grease cup or fitting, in

evidence as Exhibit No. 5. This assembly of apparatus cannot possibly come within the scope of the claims 1 to 8 of the Gullborg patent because there is now, in this apparatus, no possibility of the production of a cleansing vacuum or any vacuum at any time, or under any conditions that may occur during its use or operation, because, in order to render it possible for any spring-pressed, reciprocating cup-washer to function as a vacuum producing element of the apparatus, it is essential in the use of the apparatus as a lubricating device to perform a special act prior to the act of uncoupling the compressor from the grease cup fitting, and that special act is the reduction of, or the entire elimination of the pressure under which the lubricant exists throughout the whole apparatus. Since there is in this apparatus no means whatever for relieving that pressure prior to the act of uncoupling, it is consequently physically [fol. 239] impossible to have any cleansing vacuum or any vacuum whatever, either at the coupling, at the grease cup fitting or at any other place in the apparatus.

The defendant's coupler, in evidence as Exhibit No. 8-C and the defendant's coupler in evidence as defendant's Exhibit No. 6-C, are both structurally and functionally substantially alike.

From defendant's pump, in evidence as Exhibit No. 8-A, the defendant's hose and coupler, in evidence as Defendant's Exhibits Nos. 8-B and 8-C, respectively, were detached and to this defendant's pump, Exhibit No. 8-A, the hose and coupler, in evidence as Exhibit No. 41, were affixed and the coupler of this exhibit No. 41 was connected to the Gullborg-Alemite grease cup comprising Exhibit No. 5.

This apparatus does not, in any sense, come within the scope of the claims 1 to 8 inclusive of the Gullborg patent, because there is no possibility, in the use of this apparatus, of producing the one important function of the Gullborg device; that is to say, this apparatus cannot produce the cleansing vacuum or any vacuum whatever, at any point, or in any position, because in this combination of apparatus there is no means whatever provided or available for relieving the pressure of the lubricant existing within all parts of the apparatus prior to the act of uncoupling the compressor part from the grease cup fitting.

In reading claim 14, a correction is made of the last word which is the word "pump." It is obvious that this word is

an error and it was intended to be the word "cup." So reading Claim 14 with the word "cup" substituted for "pump" everything applying to Claim 15, applies exactly the same to Claim 14, and in fact the only difference between those two claims is a slight difference of wording in regard to the real element which is described in those claims, namely, the grease cup.

In the Zerk patent in suit there is disclosed a compressor and grease cup or fitting or lubricator, for lubricating bearings of machinery. In this apparatus, a joint is made between the compressor and the grease cup by the mere contact of the nozzle of the compressor with the grease cup, under the influence of the pressure of the hand of the operator.

The nozzle of the Zerk compressor is provided with a specially shaped surface at the end, intended to contact with the grease cup, and Zerk shows this feature in various forms, including a concave, spherical contact surface, a [fol. 240] spherical convex surface and a circular edge contact surface. The grease cups of Zerk, in accordance with these variations of the nozzle contact surface, vary in design correspondingly. Thus, where he uses a concave spherical surface in the nozzle, he provides a circular external edge on the projection of the grease cup. Where he uses a convex spherical surface on the nozzle, he uses an internal edge in the grease cup. Where he uses a circular external edge on the nozzle, he uses a concave spherical surface in the grease cup fitting, the surface being provided for the purpose of making a tight joint against the leakage of lubricant, under pressure, when the apparatus is in use.

A copy of the Zerk patent in suit was introduced in evidence as Defendant's Exhibit No. 42.

A device was submitted to the witness, who stated that it is substantially the compressor device of the Zerk patent.

The nozzle of this compressor has, in its outward end, a substantially concave spherical surface adjacent to the lubricant orifice, evidently intended for contacting with something, there being no other means of connection shown.

On the handle of this device are found the words: "Made by the Allyne-Zerk Co., Cleveland, U. S. A." and on the body are found "No. 6-D Automatic; Patented Dec. 4, 1923; Other Patents Pending; Directions: Use soft grease, pack

in solid to prevent forming air pockets. Press nozzle against nipple and repeat if necessary; Mfg. by The Bassick Mfg. Co., Chicago, U. S. A."

The device so identified was introduced in evidence as Defendant's Exhibit No. 43.

Another device was submitted to the witness, who stated that it is a physical embodiment of the grease cup, lubricator or fitting or nipple of the Zerk patent. It is the grease cup or nipple of Figure 1, Figure 2 and Figure 3 of the drawing of the Zerk patent.

The Zerk type device so identified was introduced in evidence as Defendant's Exhibit No. 44.

Another device was submitted to the witness, who stated that it is a substantial duplicate of the previous device, with the exception that it is cut open or sectioned.

[fol. 241] This last device was introduced in evidence as Defendant's Exhibit No. 44-A.

Another device was submitted to the witness, who stated that it is a duplicate of the nozzle found on the Zerk compressor Exhibit No. 43, with the exception that it is cut open or sectioned.

This last device was introduced in evidence as Defendant's Exhibit No. 43-A.

Another device was submitted to the witness, who stated that it appears to be designed as a nozzle for a lubricating apparatus somewhat similar to, though varied from the nozzle of the Zerk compressor.

Q. 269. Please point out wherein this device differs from the Zerk nozzle in essential or vital respects.

By Mr. Hansmann: I object to the question that the witness has not testified that the device differs in essential or other particulars from the Zerk patent, and the question was therefore drawing an inference which was not originated by the witness.

By Mr. Kalish: I will now ask to have the witness' last answer read. (Answer read.)

It appears to me that the witness has given his opinion to the effect that the device in question varied from the corresponding device in the Zerk patent. In view of this

it seems entirely proper to ask the witness wherein this device varies or differs from the corresponding device of the Zerk patent, and I will ask the witness therefore to answer just that, but I will also ask him to have particular reference to variations or differences which he might consider material or essential.

A. The variation that I referred to in my previous answer, is a material variation, inasmuch as this nozzle has no spherical shape which might be used in the same way as the spherical contact surface of the nozzle of the Zerk compressor. The only surface that might be used in this nozzle as a contacting surface is not spherical but conical; this difference constituting a very material distinguishment between this nozzle and the Zerk spherical surface nozzle.

The device so identified by the witness was introduced in evidence as Defendant's Exhibit No. 45, Defendant's con-
[fol. 242] tact nozzle, subject to further identification of this device as to its origin.

Another device was submitted to the witness, who stated that it appears to be a true duplicate of the last nozzle, Defendant's Exhibit No. 45, sectioned, however.

The sectional duplicate of Exhibit No. 45 was introduced in evidence as Defendant's Exhibit No. 45-A.

As the principal function of the spherical, metallic contact surface and the circular, metallic contact edge which Zerk employs as the connecting means between compressor and grease cup, he describes and shows in his patent, the capability of his nozzle and grease cup nipple when contacted together to provide and maintain an effective pressure-tight joint at almost any practical angle, and in fact, at very considerable angles of relation of the axis of the compressor nozzle to the axis of the nipple, whereby it is evidently unnecessary in the use and operation of the device to maintain any very close axial relation of these parts. In fact, he shows and describes a very wide variation.

Zerk's theory of a combination of a spherical contact surface and a circular contact edge for obtaining contact at a variety of angles is based on correct scientific principles. The principle is the fact that a cylinder circle surface contacting with an embracing concave spherical surface will make a continuous contact with that spherical sur-

face, irrespective of the actual sector of the spherical surface that is engaged by the cylinder circle surface. Thus, since there is perfect contact between these two surfaces, at all points of the sphere or parts of the sphere surface, a pressure-tight joint is possible of maintenance. In this case, this pressure-tight joint is possible of maintenance when the compressor nozzle is held at widely varying angles, in relation to the fitting or nipple.

A drawing was submitted to the witness, who stated that it aptly and fairly represents, on an enlarged scale, the contact nozzle and the grease cup disclosed in the Zerk patent.

The drawing was offered in evidence as Defendant's Exhibit No. 46, with the provision that a photostatic copy of this drawing may be substituted.

By Mr. Hansmann: I object to the admission of this [fol. 243] drawing, on the ground that it has not been sufficiently identified by the witness.

Q. 275. Mr. Gibson, just state briefly what part of the drawings of the Zerk patent is portrayed or reproduced substantially in this drawing, Exhibit No. 46.

A. The grease cup or nipple of the Zerk patent drawing is reproduced in this drawing, with the slight difference that the nipple of the drawing is not entirely sectioned. The co-acting nozzle of the drawing is the same as the nozzle of the Zerk patent drawing as far as the relation of the two part are concerned, and this drawing fairly and properly represents the relation of the Zerk nozzle and the Zerk nipple, as related in use.

Q. 276. Mr. Gibson, which of the several forms of nozzles and nipples shown in the Zerk drawings, does this drawing represent?

A. It represents the nozzle and nipple shown in Figures 1, 2 and 3 of the Zerk patent drawings.

The Zerk nipple in evidence as Defendant's Exhibit No. 44 was placed with the defendant's nozzle (in evidence as Defendant's Exhibit No. 45) in operative relation. The contact between the two consists of an exterior circular line on the nipple, and a cone surface on the nozzle.

Q. 278. Mr. Gibson, I now hand you a drawing and ask you to state whether this drawing fairly represents the

Zerk nipple before you as a physical exhibit No. 44 and the defendant's contact type of nozzle before you as Exhibit No. 45, and whether this drawing likewise correctly represents the relation of the two when in operative contact with each other.

By Mr. Hansmann: I object to the question. The question is so stated as to present to the witness the conclusions which it is desired he shall reach, and does not permit the witness to impartially examine the drawing and reach his own conclusions relative to the showing thereof.

By Mr. Kalish: I will let the question stand and will ask you, Mr. Gibson, to answer it, taking sufficient time however, first, carefully to examine the physical exhibits of Zerk nipple and the defendant's contact nozzle as well as the drawing before you.

A. This drawing quite effectively represents the physical [fol. 244] example of the nipple of the Zerk apparatus, and also the nozzle of the Defendant's Exhibit No. 45, and it also correctly represents the contact relation between these parts.

The drawing so identified was offered in evidence as Defendant's Exhibit No. 47.

When the defendant's contact nozzle (Defendant's Exhibit No. 45), is in contact with the Zerk nipple (Defendant's Exhibit No. 44) so that the axis of the nozzle corresponds very closely with the axis of the nipple, a fluid-type joint would be attained, and on account of the rounding of the contacting edge of the Zerk nipple it would be possible to maintain a fluid-tight joint of these contacting parts if the axis of the nozzle were moved to a very slight degree or to a very slight angularity to the relation with the axis of the Zerk nipple, but such a fluid-tight joint would not be mainatined if the axis of the nozzle were moved very materially or to a great degree from the axis of the nipple, on account of the shape of the related contact surfaces—the nozzle not being provided with a spherical contacting surface. The fact that this nozzle is provided with a conical contacting surface introduces a geometrical law, which provides that a circle and a cone cannot be in material contact with one another when the axis of the cone is out of line with the axis of the cylinder of which the circle forms a

part. In this case, the rounding of the edge of the nipple contact surface permits a very slight displacement of the axis of the nozzle, and the maintenance of a pressure-tight joint within those limits, in practice.

The shape of the intersection of a sphere by a plane is circular. The shape of the intersection of a cone by a plane is elliptical under all conditions, except when the axis of the cone is at right angles to the plane. Then the intersection is circular. These geometric propositions have a bearing upon the formation of a seal between the Zerk grease cup of the Zerk patent and the contact nozzle of Zerk and the defendant's contact nozzle.

In the Zerk contact seal, shown in the Zerk patent, there is embodied the geometric proposition of a plane cutting a sphere.

In the fluid seal or contact seal established between the Zerk nipple of the Zerk patent drawing and the defendant's contact type of nozzle there is embodied the geometric proposition of a plane cutting a cone.

In the combination of defendant's contact type of nozzle [fol. 245] with the physical Zerk nipple in evidence, there is embodied the geometric proposition of the plane cutting a cone, modified by the fact that the Zerk nipple, in order to conform to the theory of a plane, would have to have a sharp theoretical and impractical external edge.

The Zerk type nipples in evidence, have a rounded edge of spherical section, approximately.

Claim 2 of the Zerk patent does not read upon any apparatus consisting of this pump and defendant's contact nozzle, under any conditions and including when that nozzle is contacted with the Zerk nipple, because certain elements of the claim are not present in this combination of parts. The elements which are not present are "the nozzle contact face having a concavely spherical surface." This element is not present in the nozzle of this apparatus, the "other contact face having a dirt cutting circumferential edge portion adapted to be embraced within the spherical surface of the nozzle fact." This element is not present in the apparatus inasmuch as there is no contact face having such a dirt cutting circumferential edge portion embraced within a spherical surface, there being no such spherical surface there. The next element of the claim which is not present is the contact between the nozzle and the receptacle element

or nipple "from any one of a plurailty of angularly different directions to make a sealed lubricant conducting connection between the face openings."

Claim 3 does not read upon this apparatus, to wit: one of the defendant's pumps (Exhibits Nos. 6-A or 8-A), the defendant's contact nozzle and the plaintiff's Zerk type of nipple, inasmuch as there is in that apparatus no contact face having a concavely spherical surface; there is no contact face having a dirt cutting circumferential edge portion adapted to be embraced within the sperical surface of another face, and there is not, in this apparatus, provided a contact between the faces when the nozzle is pressed against the receptacle from any one of a plurality of angularly different directions to make a sealed lubricant conducting connection between the face openings. Claim 5 does not read upon this apparatus because the nozzle contact face has no concavely spherical surface. The receptacle contact face is not received within and does not engage a concavely spherical surface of the nozzle face because of the absence of that spherical surface, and the receptacle contact face has no dirt cutting circumferential edge portion and the receptacle contact portion does not [fol. 246] make and maintain a sealed lubricant conducting connection between the face openings from any one of a plurality of angularly different directions, as directed by this patent.

A copy of United States patent issued to C. F. Wallace for a Grease Container, No. 1,494,652, dated May 20, 1924, was then submitted to and identified by the witness.

This patent discloses a compressor and a grease cup or nipple, for use in lubricating parts of machinery by hand, and is of the contact type; that is to say, the connection between the compressor and the nipple is made by hand pressed contact.

The contact nozzle of the Wallace compressor is made of incompressible material and its contact face is in the form of a cone.

The lubricant receptacle or nipple of Wallace is provided with a closure, and its contact surface is provided for cooperation with the nozzle contact surface, rounded generally, or spherical.

The defendant's contact nozzle, in evidence as Defendant's Exhibit No. 45, is substantially an embodiment of part of the device shown and described in the Wallace Patent. It is an embodiment of the conical contact surface of the Wallace.

The defendant's contact nozzle, in evidence as Defendant's Exhibit No. 45 and No. 45-A is a substantial embodiment in all material respects, of the contact nozzle shown in the Wallace patent and designated in the patent drawing of Wallace by the numeral 14.

A copy of the Wallace patent No. 1,494,652 was introduced in evidence as Defendant's Exhibit No. 48.

A copy of the Wallace Reissue patent No. 16,787, dated November 22, 1927 assigned to the Bassick Mfg. Co. was introduced in evidence as Defendant's Exhibit No. 49.

A copy of the British patent to Clarkson, No. 6940 of 1904, was submitted to the witness.

There is disclosed in this patent a contact joint in which the one part has the form of a cone and the other part has the form of a sphere, for the connecting of a compressor to a nipple or fitting may be part of an apparatus to be lubricated.

Clarkson discloses more particularly, a contract joint of the cone and sphere type, applied in his case, for the purpose of making a pressure-tight joint between the [fol. 247] nozzle of an air pump and the nipple of a fluid reservoir tank, that nipple being provided with a check valve and a hand shut-off valve for retaining the air within the tank after the act of compression. The joint is described as being effective against the loss of pressure at the joint during compression, and as providing a large degree of variation of the axial relation of the compressor to the axis of the conical part of the joint, and it is further stated that this joint is unlikely to become defective in use.

Considering the fluid conducting seal or joint, disclosed by Clarkson, and the form of fluid conducting seal or joint established when the defendant's cone type of contact nozzle on the end of the pump, in evidence as Exhibit No. 45, is applied to the Zerk nipple, in evidence as Exhibit No. 44, the character of the parts of these two joints is substantially alike. There is a reversal of the functioning parts of the joint, inasmuch as Clarkson has a spherical

surface on the nozzle of his pump which is convex spherical, and correspondingly Clarkson's nipple is cone shaped; whereas in defendant's nozzle a cone is used for co-operation with the spherical surface of the Zerk nipple. This is a mere reversal of the two parts and without effect upon the functioning parts.

The fluid conducting seal or joint of Clarkson is capable of a swivelling action, that is, a variation of the angular relation of the two parts so joined temporarily, as described in his specification and shown in his drawing.

A copy of British Clarkson patent No. 6940 of 1904 was introduced in evidence as Defendant's Exhibit No. 50.

A copy of the Manzel patent No. 1,459,662 of 1923 was submitted to the witness. This patent discloses a lubricating apparatus for lubricating various machinery, having a compressor and particularly a hand pressed contact joint between a check valve nipple and the nozzle of the compressor.

The principal difference between the Manzel and Zerk patents is in the use by Manzel of a compressible washer for the contacting surface of his nozzle; otherwise, fundamentally there is no difference.

The lubricating system or apparatus of Manzel could aptly be characterized as a lubricating system comprising a plurality of similar valved grease cups or nipples, stationarily affixed to the bearings, and a common portable [fol. 248] lubricant compressor having a discharge nozzle adapted to establish a temporary connection with any one of the nipples, by mere manual pressure produced contact. Both apparatus serve the same purpose in the same manner.

Copy of the Manzel patent No. 1,459,662 was introduced in evidence as Defendant's Exhibit No. 51.

A copy of the United States patent No. 499,541 issued to Hay & McIntyre, June 13, 1893, was handed to the witness who stated that particularly in lines 74 to 110 inclusive on page 3 of the specification, and Figures 2, 16, 25 and 26 of the drawings there is disclosed a device for lubricating bearings of a machine, especially such bearings as reciprocate in their operation, and there is provided, attached to such a bearing a nipple or lubricant receptacle having a concave spherical surface as a guide

portion for engagement with a convex spherical nozzle of a lubricant compressor pump, which pump is so disposed in relation to the reciprocating bearing and its nipple that when that bearing and nipple approaches the pump nozzle, the pump nozzle will be automatically guided into correct contact relation with the nipple and when that contact is made between the contact edge of the nipple and the convex spherical pump nozzle, a fluid pressure-tight joint is formed and the further movement of the bearing and its nipple produces operation of the compressor, thereby lubricant is forced from the pump compressor into and through the nipple into the bearing.

Q. 310. I now hand you a device and ask you please to examine it and then to state whether it is a true and correct physical embodiment of the pump construction shown in Figures 25 and 26, as well as in Figure 16, in all material respects.

By Mr. Hansmann: I object to the defendant's line of questioning. All of the questions are leading and in effect result in the testimony being given by the defendant's attorney instead of being the independent testimony of the witness.

A. It is a correct physical embodiment of the compressor of this patent.

By Mr. Kalish: I now offer in evidence the Hay & McIntyre patent No. 499,541, and ask to have it designated as Defendant's Exhibit No. 52, and I offer in evidence the [fol. 249] last device identified by the witness and ask to have it identified as Defendant's Exhibit No. 53, the Hay & McIntyre Lubricant Pump.

Another device was submitted to the witness who identified it as true embodiment, in all material respects, of the lubricant receptacle of Hay & McIntyre, shown in Figure 26.

The last device identified was introduced in evidence as Defendant's Exhibit No. 54, Hay & McIntyre Lubricant Receptacle.

The contact between these two parts (the Hay & McIntyre pump, Defendant's Exhibit No. 53, and the Hay & McIntyre lubricant receptacle, Defendant's Exhibit No.

54), is a line contact or a sharp edge contact formed of the intersection of a concave sphere and the cylindrical bore of the lubricant receptacle with the convex spherical surface of the nozzle of the pump or compressor. When the joint between the two parts is completed, the contact is between the sharp edge referred to and the spherical nozzle of the pump.

The concave surface of the lubricant receptacle of Hay & MyIntyre is not a contact surface in the operation of lubrication, but it does serve the purpose of a guide to insure that the pump nozzle shall correctly contact with the edge of the lubricant receptacle, irrespective of any slight displacement of the axial relations of the two parts as they approach one another. It insures that the pump nozzle and the nipple or lubricant receptacle will arrive at correct inter-relation for the purpose of lubrication.

Each and every one of the elements of claim 4 of the Zerk patent is present in the Hay & McIntyre disclosure, particularly in Figure 26.

The Hay & McIntyre compressor with a convex spherical nozzle is adapted for a swiveling connection with the lubricant receptacle of Hay & McIntyre.

Q. 317. Is it capable of forming a good fluid connection when the Hay & McIntyre lubricant pump is placed at a plurality of angularly different directions, with respect to the lubricant receptacle?

By Mr. Hansmann: I object to the question, as defendant's attorney is continuing to dictate the testimony instead of obtaining the testimony of the witness himself.

[fol. 250] A. It is.

In the Hay & McIntyre device, the pump or lubricant dispenser is necessarily and in cases, designedly mounted in positions where it can be flimsily supported or supported in such a manner that it may move slightly laterally to the axis of the pump and consequently when that pump or lubricant dispenser happens to be in such a position that its axis does not correspond with the axis of the nipple or lubricant receptacle, the provision made by Hay & McIntyre for overcoming this difficulty, namely, the concave spherical surface of the lubricant receptacle and the convex spherical surface of the pump nozzle, accomplishes the object of forming a pressure-tight joint between the parts,

irrespective of the exact relation of the lubricant dispenser to the nipple.

The spherical concave surface was provided for the first contact of one part with the other, and as a guide for directing the concave surface of the pump nozzle to its correct lubricating position, that is to say, to guide the pump nozzle into contact with the sharp edge of the conduit of the nipple. The nipple is the lubricant receptacle G4 of Figure 26 of the drawing of the Hay & McIntyre patent.

The swivelling capacity between the pump and the receptacle is provided because the pump may be supported so that its axis is out of line with the axis of the receptacle. Consequently its nozzle is out of line with the axis of the receptacle and must be brought into coinciding relation with the edge of the opening in the receptacle, in order that a pressure-tight joint may be present. When the pump nozzle is so brought into coinciding relation with the lubricant receptacle, the axis of the pump itself may be at a considerable angle to the axis of the nipple and still maintain a pressure-tight joint against leakage of the lubricant being forced therethrough.

The lubricating system or plan of Hay & McIntyre would not be practicable without the swivelling sealing contact between the pump and lubricant receptacle, and in fact this swivelling relation of the pump and the receptacle forms an important feature of the patent of Hay & McIntyre.

If the pump of Hay & McIntyre were detached from i-s support and used merely manually, it would function in exactly the same manner as the pump of the Hay & McIntyre Patent, with the added feature that when the pump was held in the hand it could be applied to a nipple at- [fol. 251] tached to a bearing which did not reciprocate, and in such case, the reciprocation necessary for the operation of lubricating the bearings would be provided by the movement of the hand in pushing the pump into contacting relation with the nipple, and of course, in this case it is obvious that some reservoir of oil would be attached to, form a part of the pump. Such a hand operated pump would have all the advantages possessed by the fixed pump, in regard to the flexibility of its axial relation to the nipple or lubricant receptacle during the act of lubricating.

The similarity between the Hay & McIntyre contract seal and the Zerk contract seal is that both use a spherical surface for one contact face and the sharp edge for the other contact face, that sharp edge being provided for the purpose of automatically removing dirt, waste, or other material from between the contacting faces, so as to permit a fluid-tight and pressure-proof joint to be maintained during the act of lubrication. In this respect, these two devices are exactly similar and accomplish the same object in the same way. The only difference between these joints is that in the case of Zerk, he chose to use a concave spherical surface for the one member of his joint, and May & McIntyre chose to use a convex spherical surface for that member of their joint. The principle involved in each of these joints is exactly identical.

There is no difference whatever in principle or effect or operation in the circular edge portion of the seal of Hay & -Intyre and of Figure 5 of Zerk are exactly similar, both in principle and design.

The pump nozzle of Hay & McIntyre is of convex spherical form; so also is the pump nozzle of Figure 5 of Zerk. The nipple or lubricant receptacle of Hay & McIntyre has an internal circular edge for contacting with and forming a lubricant seal with the convex spherical nozzle of the pump; and so exactly similarly has the nipple or lubricant receptacle of Figure 5 of Zerk and internal circular edge. The Hay & McIntyre contact seal permits the dislocation of the nozzle axis axially in relation to the axis of the nipple or lubricant receptacle; and so exactly similarly does the Zerk. The Hay & McIntyre nipple or lubricant receptacle has a sharp dirt cutting edge; and so has the nipple of Zerk.

The Zerk lubricant receptacle (in Figure 5 of Zerk) is provided with a guiding surface of cone shape, serving to guide the nozzle of the pump into its correct relation with [fol. 252] the nipple, for the formation of a pressure-tight joint and this guiding surface serves the same purpose and functions in the same manner as the concave spherical guiding surface of the lubricant receptacle of Hay & McIntyre.

An average mechanic would not even have to go so far as to design such a variation of Figure 5 of Zerk, because it would naturally occur to him that those parts were revers-

ible; having the thought of a sphere and a cutting edge, he would exercise a natural choice in the matter and so, for certain of his purposes, would reasonably reverse the positions of these two elements of the joint.

The United States patent No. 1,400,871 of December 20, 1921, issued to Crotty, discloses an oil cap or lubricant receptacle or nipple, for the purpose of lubricating parts of machinery.

The United States patent to Crotty No. 1,400,871 of December 20, 1921 was introduced in evidence as Defendant's Exhibit No. 55.

Q. 332. Mr. Gibson, I now ask you to compare the drawing of Crotty's device with the lubricant receptacle shown in Figure 3 of the Zerk patent, and to point out whether these two devices are in any way similar, and if so, point out also what structural elements or features are common to these two devices.

A. The lubricant receptacle of Figure 3 of the Zerk patent, and the Crotty oil cap are alike in general design, in purpose and in structural detail, inasmuch as they both serve exactly the same purpose as lubricant receptacles for oiling bearings of machinery and they are both provided with check valves or closures at their outward ends, which closures are spring-pressed against an internal flange, and they both have exterior circular edges at their orifices.

A drawing was submitted to the witness who stated that it shows very good reproductions of the Crotty and the Zerk oil cup or nipple.

Q. 334. Mr. Gibson, could the device of Crotty be used in combination with the lubricant dispensing pump of Zerk, having The Zerk nozzle shown in Figure 3 of the Zerk patent, without in any way altering the resign, form or [fol. 253] construction of the Crotty device, other than to reduce its size in proportion to the particular size required?

By Mr. Hansmann: I object to the question on the ground that it is leading and is in effect the testimony of the attorney and not that of the witness. As defendant's attorney continues to proceed in asking this type of question, in spite of the repeated objection raised by plaintiff's counsel, I hereby make this objection a standing objection to this type of question, this standing objection to apply to all questions of this kind throughout the testimony.

By Mr. Kalish: The preceding question is considered to be entirely proper and in good form, and is for the purpose of eliciting from defendant's mechanical expert witness, whether in his opinion, the Crotty device could serve the same purpose, or could be used in the same way as the Zerk lubricant receptacle or nipple shown in Figure 3 of the Zerk patent, without altering the design or shape of the Crotty device but merely varying its size. It seems that the defendant's mechanical expert witness is qualified to give his opinion as to the capacity for use of a prior art device and it cannot be seen how this information can be elicited from the witness, except by a question directed to this point, which is all that the question objected to is in this case.

Q. 335. Mr. Gibson, will you kindly answer the question?

By Mr. Hansmann: Plaintiff's attorney has no objection to any proper question being asked the witness and it is not my intention to attempt to limit the scope of defendant's testimony by objecting to this or other similar questions. In connection with previous questions of this nature I have pointed out the manner in which these questions could be asked in a proper manner, without in effect dictating the answer to the witness, and for the information of defendant's counsel, I will rephrase the present question in what I consider a proper form. The question as rephrased is: "Mr. Gibson, if any attempt were made to apply the Zerk nozzle shown in Figure 3 of the Zerk patent, to the nipple shown in the Crotty patent, state what conditions would obtain, and how these devices would cooperate." Plaintiff's attorney feels that the persistance of defendant's counsel in continually submitting lead ques- [fol. 254] tions of the type objected to by plaintiff's attorney, is based on a well organized plan of action, with the object of leading on the witness and avoiding any possibility of straying from the desired answer of failing to give the desired answer. This feeling is strengthened by the testimony given by the witness concerning the shape of the intersection formed by a plane and a cone, and a plane and a sphere. In testifying on this point, the witness was not lead along by the nature of the questions asked, and as a result he failed to give answers which were correct or desired, and in order to correct this mistake by the witness

it was necessary for defendant's counsel to propound additional questions, which indicated the inaccuracy of the statements made by the witness, and permitted him and in fact taught him how to correct these inaccurate statements.

By Mr. Kalish: It is not my purpose unnecessarily to answer plaintiff's objections, particularly objections made a day or more subsequent to the questions and answers, but it might be well to note here that the particular previous testimony of the witness to which plaintiff's counsel refers, relates merely to geometric propositions, the correctness of which a Court may take judicial notice of, without even any testimony relative to it. Any standard text book on solid geometry will be ample warrant for taking judicial notice of the two geometric proposition- sought to be covered by the testimony particularly referred to, to-wit: the first geometric proposition that every intersection of a sphere by a plane is a true circle, and the second geometric proposition that a plane intersecting a cone will produce a true circle only when the plane is at a right angle to the axis of the cone, and that if the plane is at any other angle, the intersection will be a shape other than a true circle. Hence the witness' momentary and apparently inadvertent mistake as to the second proposition is of absolutely no consequence or import, because as geometric propositions, these matters may be taken judicial notice of. I will now ask to have the last question read and ask Mr. Gibson to answer it.

(Question read.)

By Mr. Hansmann: Plaintiff's objection to this question stands.

[fol. 255] A. Since there is no specification in the Crotty patent as to the size of his nipple or lubricant receptacle, it is obvious that a mechanic making such nipple would use his own judgment as to the size, but would retain the general conformation or design of the nipple and in so doing he would produce a nipple which would be entirely usable with the Zerk pump and nozzle of Figure 3 of the Zerk patent, and such a Crotty nipple would co-operate with that pump nozzle for the purpose of lubricating machinery.

If Crotty's device were reproduced of a size corresponding to the Zerk nipple it would be in every way just as capa-

ble of all the functions and uses of which the Zerk nipple is capable when the Zerk pump and nozzle is applied thereto, as the Zerk nipple.

The physical or mechanical principle employed by Gullborg in his endeavor to provide a cleansing vacuum effect is the change of pressure incident to a change of volume of a fluid container. In this case, the fluid container is the coupler, conduit and pump of the Gullborg compressor, wherein he arranges to change the volume by the movement of his cup washer during the act of uncoupling the female coupler from the male grease cut fitting. This change of volume is provided by the inclined relation of the part of his bayonet slot referred to in his drawing by the number 23, to the part of his slot referred to in that drawing by the number 22, without which inclined portion of slot his device would be incapable of performing the motions to which he ascribes the production of his theoretical cleansing vacuum.

The slot in the defendant's coupler is not disposed in an inclined manner, or in the manner of the Gullborg slot.

The occurrences taking place in the Gullborg patent coupler when uncoupling are best stated by the wording of the specification of the Gullborg patent. The first movement referred to in the specification is intended to produce a greater compression within the conduit than existed prior to that movement, whereby, according to Gullborg, some further quantity of lubricant is forced out of the compressor and its parts and into the grease cup or fitting. When this action has been supposedly completed the second movement referred to occurs and is supposed to result in the [fol. 256] production of vacuum within the coupler, by reason of the change of volume of the grease-containing parts. It is evident that the second movement cannot accomplish its object without the concomitant first movement having been accomplished.

The inclined portion of the slot actually has the effect of making the operation of disconnecting the female coupler from the fitting more difficult, and with the higher pressures in use in the lubricating of bearings it becomes practically impossible to remove the female coupler from the grease cup, without the aid of extraneous machinery such as pliers, Stillson wrenches, or the like, and when such ex-

traneous tools are used, the effort to uncouple may and does result in the unscrewing of the grease cup fitting from the bearing to which it should be attached. This condition also may, and does result in the necessity for relieving the pressure by some means within the compressor, so as to uncouple the two parts of the coupler to be disconnected without derangement, or it is otherwise necessary to take further tools and hold the grease cup fitting against rotation while putting tremendous force upon the female coupler to disengage it from the grease cup.

The movable cup-shaped washer of Gullborg is an excellent means of forming a fluid-tight joint and it was so chosen by both Seng and Barcus for that purpose.

Seng and Barcus use a cup-shaped sealing gasket for the purpose of making a tight seal against the loss of lubricant under pressure, in exactly the same way as Gullborg uses it. They do not, however, attribute any theoretical vacuums to its use.

There is no reason at all why Barcus should not have claimed a vacuum for his cup-shaped washer, spring-pressed as it is in exactly the same way as in Gullborg, and he could still have done so. He certainly had the apparatus there which might have produced just as much theoretical vacuum as may be producible in Gullborg.

The pronounced and definite purposeful inclination of the Gullborg slot is a distinct and unqualified disadvantage in the lubrication of the bearings of machinery, inasmuch as it is an offset to the use of extremely high pressures such as are frequently necessary, and it causes a definite amount of waste of time, particularly in the act of uncoupling and especially when using particularly high pressures.

[fol. 257] The approximate pressure that could be produced in the lubricant dispensing compressor shown in the Gullborg patent and exemplified in the plaintiff's Gullborg-Alemite compressor, defendant's Exhibit No. 7 is about five hundred pounds per square inch, depending upon the strength of the operator, but it requires a strong man to get five hundred pounds.

Five hundred pounds pressure is certainly not a high pressure in the lubrication of bearings, and not sufficient for all purposes in lubrication of bearings, particularly when they are tight or clogged. Pressures as high as ten

thousand pounds are at times essential for the proper lubrication of certain bearings, in certain conditions.

Testing the pressure capacity of the Alemite compressor, exemplifying the compressor of the Gullborg patent, the witness succeeding in raising two hundred pounds pressure per square inch with the Alemite compressor, Exhibit No. 7.

Testing Exhibit No. 2, Alemite Service Compressor, the witness raised a pressure of twenty-two hundred pounds pressure per square inch. With the defendant's compressor, Exhibit No. 6, the witness attained a pressure of five thousand pounds per square inch. With the compressor, Defendant's Exhibit No. 8, the witness raised the pressure of about five thousand pounds per square inch.

In each instance the female portion of the coupling of the compressor was coupled to a grease cup fitting, forming part of the conduit leading to two hydraulic pressure guages, one of which has a scale reading to a maximum of one thousand pounds per square inch, the other of which has a scale reading to a maximum of ten thousand pounds per square inch. These two gauges may be used together or the one having the higher scale reading may be used separately, owing to the provision of the stopcock in the line having the lower gauge maximum reading.

The Alley compressor, defendant's Exhibit No. 20, with the bayonet catch female coupler was applied to the Alemite grease cup fitting that was used in the previous tests and with this Alley gun, the witness raised a pressure of three hundred pounds per square inch.

The Dot compressor was applied to its related grease cup fitting and with this Dot compressor the witness raised the pressure of seven hundred pounds per square inch.

[fol. 258] Defendant's counsel also introduced in evidence the United States patent to Seng, No. 1,322,357 of November 18, 1919, as defendant's Exhibit No. 56. Defendant's counsel also introduced in evidence a device designated as the O. K. Screw type of hose and coupler as Defendant's Exhibit No. 57 herein. This device is submitted as a duplicate of plaintiff's Exhibit No. 109 in the case of Bassick vs. O. K. Mfg. Co., Equity 79, U. S. District Court, Southern District of Ohio, Western Division. The physical exhibit submitted herewith is also Defendant's Exhibit B accompanying the Jones affidavit in the case entitled: Bassick v. Frank Miller, Equity 2759, U. S. District Court, District of

New Jersey. The submission of this exhibit is subject to the same qualification as was the submission of Defendant's Exhibit Nos. 16 and 20.

Defendant also introduced in evidence a drawing of this O. K. screw type coupler as Defendant's Exhibit No. 58.

Upon cross-examination, Mr. Gibson testified as follows:

In the recent tests of the compressor forming Exhibit No. 6 he operated this compressor by placing it on the floor using both hands and putting his whole weight on it. Before he could remove the coupler 6-C of this compressor from the fitting at the completion of this test he found it convenient to release the pressure and did so. Mr. Gibson tried to remove the compressor before releasing the pressure. He might have been able to do so if he had applied greater force, but it was more convenient to release the pressure. He did not apply his total strength to release this coupling. He tried a couple of times to remove the coupling before he released the pressure.

Mr. Gibson, in operating the reciprocating pump 8-A of the large service compressor forming Exhibit No. 8, likewise placed this pump on the ground and used both hands to operate the lever, and also applied his weight to this lever. Likewise, at the completion of this test he released the pressure before he removed the coupling.

The portable, or in fact any compressor is well disclosed in the Seng patent, Defendant's Exhibit No. 29, to any one having any knowledge of this art whatever in the wording of the lines 24 and 25, as follows: "This instantaneous joint is more particularly applied in the case where it is desired to have forced lubrication with oil, grease and so on." This [fol. 259] wording obviously includes the parts which are necessary to provide the desired forced lubrication, otherwise the joint of this patent would be a particularly useless thing. It must be combined with a compressor in order to serve the purpose indicated. Such a compressor need not of necessity be portable. A portable compressor is one of the compressors that would of necessity be used, or of custom be used, in connection with the lubrication with oil and grease of automobiles, for instance.

The drawing of that British patent to Seng does not disclose a portable compressor. The term "portable compressor" possibly appears in the specification.

In considering this Seng British patent heretofore it was closely related by the witness, with the Seng French patent No. 468,869. In the translation of the specification of that French patent to Seng these words appear: "In such cases the coupling is connected to a tube of a pump which supplies the grease and can be fixed at will by moving the slide." This whole device is of the type which involves the use of a portable compressor and a number of grease cups or fittings attached to bearings, whereby a number of those fittings may be furnished with lubricant by a perambulatory compressor which in the very sense of the whole patent is essential to the device of that patent.

It would be possible to use a stationary compressor provided with a flexible hose having a device of the Seng patent at the end thereof to carry out the lubricating operation described by the Seng patent.

The Seng coupling disclosed in the French patent No. 468,876 is not necessarily used with a portable compressor, but by the same token it is used with a portable compressor, as very clearly shown in the publication "Omnia" in which the pictures and description all refer to the coupling with a portable compressor.

The "slide" referred to in the part of the specification of the French patent No. 486,869 above quoted, refers to a part of the coupling. It is a part which is moved in the operation of engaging the coupling to the fitting.

The witness found no specific disclosure in the French patent to Seng No. 468,869, incorporating the word "portable."

X Q. 20. Mr. Gibson, will you inspect the drawing and specification of the French patent of addition No. 20,083, and point out any part which specifically discloses a portable compressor?

[fol. 260] The witness found no such specific disclosure of a portable compressor.

X Q. 21. Mr. Gibson, I will have Q. 209 read to you and also your answer:

"Q. 209. Do they each disclose some portable grease dispensing device capable of forcing grease under pressure?

"A. They do."

Q. 209 is dependent upon Q. 206 which lists the following patents, to wit:

U. S. Patent to Laskey & Arnold of 1881;
French patent to Alley of 1906;
The French and British patent to Seng;
Seng's publication in Omnia;
Original and re-issue U. S. patents to Winkley;
The Gullborg patent in suit.

Mr. Gibson, it thus appears that you testified that the British and French patents to Seng disclose a portable compressor, does it not?

A. It does not. It refers to some portable grease dispensing device capable of performing an act in relation to the forcing of grease under pressure, and I have taken the common sense view that this coupling device would necessarily be connected with and used with a pump. Otherwise they would be useless devices, and the pump is assumed and referred to in the Seng patents, and is clearly shown in the Omnia Publication of Seng. It is obvious that these specific devices of Seng form an essential part of a lubricant dispensing apparatus. They in fact are in themselves lubricant dispensing apparatus in the same sense that the faucet of a fountain is a refreshment dispensing device, either with or without the remainder of the fountain and is intended to be connected with the remainder of the fountain for its purposes.

X Q. 22. Mr. Gibson, is there a reference to the publication Omnia in either of the French patents to Seng?

A. No.

X Q. 23. Then the disclosure of these French patents is not inclusive of or dependent upon the publication Omnia [fol. 261] but is entirely independent thereof, is it not?

A. I do not know; the date of the publication in Omnia is April 25, 1914, and the date of publication of the Seng French patent is the 18th of July 1914.

X Q. 24. Mr. Gibson, is it your idea that a patent includes, as a part of the disclosure thereof, publications which are not referred to in the patent?

A. No.

X Q. 25. Then what is the meaning of your answer to the previous question?

A. Just what I said, "I do not know."

X Q. 26. What part do the dates you mentioned play in that answer? That is, why were they included in the answer?

A. Because patents are supposed to be instruction to those skilled in the art to enable them to accomplish the objects of the patent, and if a French mechanic read the publication in Omnia regarding Seng's lubricator and observed the drawings of Seng's French patent, and read the reference to a pump contained in the specification of that drawing, he would be very well informed as to how to use this coupling, and in fact he would be very well informed as to how to use this coupling by the patent alone and without the Publication. But there is that relation for what it is worth.

X Q. 27. Mr. Gibson, the lubricant dispensing device in the Alley patent is shown as a portable device, is it not?

A. It would be considered portable on the face of it.

X Q. 28. The Winkley, Gullborg, Laskey and Arnold patent and the French publication Omnia, all disclose portable lubricant dispensing devices, do they not?

A. Yes.

X Q. 29. Mr. Gibson, in Q. 209 the British and French patents to Seng were grouped with other patents and a publication, and all of these other patents and the publication disclosed portable compressors, did they not?

A. I do not quite understand the question.

X Q. 30. I will put the question differently. In Q. 209 the French and British patents to Seng were listed with the Laskey and Arnold patent, the Gullborg and the Winkley patents, the British patent to Seng, and the French Pub- [fol. 262] lication Omnia. This French publication, and all of the patents except the patents to Seng specifically disclose portable compressors, do they not?

A. They do.

X Q. 31. Mr. Gibson, was it not your understanding that Q. 209 referred to portable compressors such as shown in this publication and these other patents?

A. I have before explained that it was not my understanding and that the question referred to "lubricant dispensing apparatus" I believe were the words.

By Mr. Kalish: It seems to me, that, from what I can remember of these various questions and answers in direct

examination, it would be very difficult for the witness, or any other witness, to recall the wording of the questions and answers given a day or two ago. It seems that whatever opinion plaintiff's counsel seeks to elicit from the witness could be obtained by questions directed or addressed to the subject matter of the desired information.

By Mr. Hansmann: The question and answer under discussion has just been read to the witness and there is no reason why he should not understand this question and answer.

X Q. 32. Mr. Gibson, do you recall referring to a coupler per se as a lubricant dispensing device anywhere in your testimony?

By Mr. Kalish: I object to that question because it seems to me that it is nothing more than a memory test. What plaintiff's counsel could do, it seems to me, would be merely to read the witness' previous testimony and ask him to verify it.

By Mr. Hansmann: The question stands.

A. I may have done, or I may not. I am not sure.

X Q. 33. Mr. Gibson, you did not frame the language used in Q. 209, did you?

A. I did not.

X Q. 34. Mr. Gibson, this language was framed by defendant's attorney, was it not?

A. It was.

X Q. 35. And you merely agreed to the question?

A. In order to answer your question, I asked that the Q. 209 and its answer be read.

[fol. 263] (Question and answer are read to witness.)

I answered the question responsively in the affirmative.

X Q. 36. Mr. Gibson, did you examine each patent referred to in this question thoroughly before you answered the question?

A. I did.

X Q. 37. Did you read the specification of each patent before answering the question?

A. I did. In parts, if not in whole.

Upon redirect examination, Mr. Gibson testified as follows:

The grease cup, (the lubricant receptacle) and the conduit coupler disclosed in Seng's French publication in Omnia, is substantially the same as the disclosure of Seng's British patent No. 3,028, and Seng's French patent No. 468,869; these illustrations and drawings being so alike that they might have been copied from one another.

These two Seng patents relate to the same subject matter as Seng's French publication in Omnia.

Testimony of Clifford L. Jones

On direct examination, CLIFFORD L. JONES testified as follows:

He is 37 years of age and resides in Manoa, Pennsylvania. He has been engaged in the sale, but not in the manufacture of lubricating apparatus. Originally his connection with lubricating apparatus, was selling the Alemite products with the Alemite Lubricating Co. of Eastern Pennsylvania. He has been service manager for the Vim Motor Truck. Operated a fleet of his own trucks for a period of over two years. Has been connected with the automobile trade since 1915, manufacturing truck and body parts. During his experience in the automobile trade since 1915 he has become acquainted with the various forms of lubricating equipment on the market, particularly for automobiles. First with the old oil cups, and then the Alemite and Zerk and Dot, and the various so-called gyp fittings, which is very similar to the Alemite.

He was connected with the Alemite Lubricator Co. of Eastern Pennsylvania approximately two years, as sales representative. He left the Alemite Lubricator Co. the 2nd [fol. 264] of October, about three months ago. His duties in connection with the Alemite lubricating equipment were selling the products in certain territories, attending the sales conferences and reading the literature they sent to their salesmen. The salesman was supposed to know the parts, study the sketches so as to familiarize himself with their operation and be able to go into a service station and correct any faults they might happen to find, any trouble the service station operator may have in operating the guns (Alemite compressors).

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The Alemite Lubricator Co. supplied the salesmen with literature relative to the operation of any part of the equipment. In fact, every article that went out had a pamphlet relative to its operation.

The witness stated that he is familiar with the piece of apparatus known as the "Alemite H-15 Service Compressor."

A piece of apparatus was submitted to the witness who identified it as one of the H-15 compressors having brass gears instead of the usual steel gears and being in every respect the H-15 compressor and functions in every respect like H-15 compressors.

An envelope and some printed literature submitted to the witness, was identified as the usual form of printed instruction accompanying this type of Alemite compressor, aptly describing the construction and use of that particular Alemite compressor.

In connection with his field work, Mr. Jones witnessed the use and operation of this particular Alemite compressor as well as some of the other forms of Alemite compressors, and has operated the same himself.

To the witness there appears to be no cleansing action in the hose coupling at the end of the hose, (the part fastened on to the pin fitting). Personally, the witness does not think there is any cleansing or suction action of the hose coupling.

In the ordinary operation of the Alemite compressors of the various different types, including the "H-15" there is always grease left on the end of the coupler or on the pin fitting in normal use.

The witness in connection with the sales organization of the Alemite Lubricator Co. and also in his connection with the garage and automobile service trade has not had brought to his attention any cleansing action inherent in the coupler.

The operation of greasing an automobile is a rather dirty and mussy operation, decidedly. It is due to the natural condition of the car, and it is due to the fact that you are [fol. 265] using a lubricant or a grease which is naturally soily or sticky, whatever type of grease or lubricant you may be using; due to the fact that invariably there is a certain amount of grease with which you come in contact. The hose may be broken and get grease all over yourself from

that; no matter how careful you can be or how careful a garage man is, there is always dirt and grease around his pits, or around his racks, or around his gun.

Q. 27. Is the act of uncoupling the hose coupling from the fitting in itself a clean operation free of excess lubricant?

A. That can be answered "yes" and "no." The majority of times lubricant will ooze out of the side of the hose coupler. You saw me wipe it off when I put it on the fitting. I wiped it on the paper. Then it is the operation. That, I would say, is invariably true.

Q. 28. What do you have in mind when you say it might be a clean operation.

A. You asked me if removing the hose coupling from the pin operation is a clean operation, did you not? I gave my answer or reason for saying that it would not; and the reason for saying that it might, would be that if the operator would take the rag with him at all times and place it over the hose coupling when he released it then he would not come into contact with the lubricant. However, very few do that.

Q. 29. Then, is it your opinion that to maintain the greasing operation more or less cleanly it would be necessary to wipe off the hose coupling each time?

A. In my opinion, yes.

Q. 30. You stated that you attended various sales meetings and conventions during your capacity as sales representative of the Alemite Lubricating Co. Will you state whether at any of these conventions, or conferences, or meetings, or at any other time in your official capacity, you learned of a certain alleged suction function or self-cleansing action of the Alemite hose coupler?

A. I do not believe that I did. I did not.

There is a relation between the Alemite Lubricator Co. of Eastern Pennsylvania and the Bassick Manufacturing Co. of Chicago. The Alemite Lubricator Co. of Eastern Pennsylvania was owned and operated by officers of the Bassick Mfg. Co. The Alemite Lubricator Co. of Eastern [fol. 266] Pennsylvania is an official sales organization for the products of the Bassick Mfg. Co. of Chicago. The Alemite Lubricator Co. of Eastern Pennsylvania does not sell anything other than products of the Bassick Mfg. Co. or its associated interests.

Upon cross-examination, Mr. Clifford L. Jones testified as follows:

His present occupation is sales representative for The R. M. Hollingshead Co. He did not know that the Bassick Mfg. Co. were suing The R. M. Hollingshead Co. He understood that they were suing The Frank C. Miller Co. He does not know the connection between the Frank C. Miller Co. other than that Frank C. Miller products are manufactured by R. M. Hollingshead Co. He is not with the Frank C. Miller Co. but with the R. M. Hollingshead Co. He does not sell products of the Frank C. Miller Co. He is connected with the sales force of The R. M. Hollingshead Co. When he left the Alemite Co. he did not go direct to The R. M. Hollingshead Co. He did not go anywhere. He had about a week or more to himself. His next position, however, was with the Hollingshead Co.

His reason for leaving the Alemite Co. was that he thought his services with the Alemite people would be about sufficient. That was the main reason. In other words, he thought that the older men, he being the oldest of the salesmen, were about to be disposed of regardless of their ability. He thought that he would either be forced to resign or he would be discharged.

In operating the H-15 compressor he did not connect the coupling with a fitting.

Upon redirect examination, Mr. Jones testified as follows:

An automobile spring, mounted on shackles or bearings to which was attached a grease cup or pin fitting was submitted to the witness, who stated that it is an Alemite pin fitting or a grease cup of the Bassick Mfg. Co.

(The witness attached the H-15 compressor to the Alemite pin fitting fixed to the shackle bearing and forced lubricant through the bearing, and then detached the compressor from the bearing.)

The pump attached to the hose and after connecting the hose coupling to the pin fitting, pumping the lubricant through the hose, the lubricant was forced through the pin fitting into the shackle bolt until it oozed out around the shackle bolt, at which time the operator knows that there is sufficient lubricant. The pumping then ceased and the

[fol. 267] hope coupling was disconnected from the pin fitting.

After detachment, the hose coupling was oozing grease, and the pin fitting was practically covered with the grease.

The witness knows of no way of preventing the oozing out of the grease from the end of the hose coupling when it is uncoupled, or the free flow of grease in the apparatus in uncoupling. Such means would be a Godsend to the service men.

There is a method of releasing the pressure which causes the flow of that grease; but theory and practice are decidedly different. The method of releasing the pressure after you force your handle down in that manner, raising it up and turning your release valve which will leave the air out of the release valve, and by pulling the handle up in that manner as far as it will go will permit the air to be taken up in the valve chamber of the handle, but not sufficient to still take the air out of the hose or the pressure out of the hose sufficiently to prevent that slight leakage.

The witness attaches the H-15 compressor again to that same Alemite grease cup and bearing and operates it again, and then performs all those steps which might be taken to relieve the pressure before uncoupling. He placed the hose coupler on the pin fitting and pumped lubricant into the shackle bearing until sufficient lubricant had been placed in the shackle bearing. He then opened the release valve allowing certain amount of lubricant to come out or to be forced out by means of air pressure in the container; also lifted the operating handle to its full height in an endeavor to prevent the leakage of lubricant out of the hose coupling after being taken off the pin fitting. The witness then removed the hose coupling from the pin fitting and the lubricant still oozed from the hose coupler. The extrusion of grease from the end of the hose coupling was not any less at the second operation than it was at the previous operation.

Upon recross-examination, Mr. Clifford L. Jones testified as follows:

He does not consider himself a good salesman. His reply when the Bassick Co. sent out a pamphlet asking the salesman to make replies and on that pamphlet, the personal one of those questions was: "Do you consider yourself a fair

salesman or a poor salesman?'' He replied to that that he was a poor salesman, regardless of the fact that he stood second on the sales force.

He stood second on the sales force of the Alemite Co. [fol. 268] according to Mr. Higgins' records; that is, his blackboard records; not knowing what his other records are. Yet he expected to be dropped. He did not consider that fair treatment of him by Alemite.

The H-15 Alemite compressor was introduced in evidence as Defendant's Exhibit No. 2; and the instructions or pamphlets accompanying this compressor were introduced in evidence as Defendant's Exhibits 3 and 4 respectively; and the Alemite pin fitting or grease cup used in the demonstration by Mr. Jones was introduced in evidence as Defendant's Exhibit No. 5.

Mr. Louis Nucho, called on behalf of defendant, testified as follows: Name: Louis Nucho; age 28; residence Philadelphia, Pa.

A copy of the French publication Omnia, here in evidence as Exhibit No. 21, and also a paper purporting to be a translation of that French publication, here in evidence as Exhibit No. 22, were submitted to the witness, who stated, that he made this translation and believes this to be a true and correct translation of the French text of this publication.

A copy of the French patent No. 468,869 to Seng, here in evidence as Defendant's Exhibit 30; and also a paper purporting to be a translation of this French patent were submitted to the witness, who stated that he made this translation and to the best of his knowledge, it is a true and correct translation of the French text of that French patent.

His knowledge of the French language is fair. He speaks, reads and writes the French language fluently.

On the forenoon of October 14, 1927, he went to the Alemite Lubricator Co., located at North 16th Street, Philadelphia and purchased some Alemite fittings or grease cups, at Mr. Kalish's request, and ordered from a man behind the counter a complete set of fittings and the man picked them out from pigeon-holes or some other boxes in the back of the counter, so many of each kind, to fit an

Essex 1925 car. He paid for them and received a slip on which the purchase price is indicated, which slip was made in duplicate, the man keeping one copy and the witness, the other. He then asked the man something about springs he [fol. 269] had there, to have something to talk about while the change came back. Then the man asked the witness what kind of grease he used, and he said, "any old kind," and the man suggested that he use their grease and showed him a can, and he said he would try it later on, but had some right now. The witness purchased the Alemite fittings for a 1925 Essex car.

A photostatic print was submitted to the witness, who stated that it appears to be a photostatic reproduction of the receipt for the set of Alemite fittings or grease cups which he purchased.

The photostatic copy of the sales receipt of the Alemite Lubricator Co. for one set of Alemite pin fittings or grease cups for a 1925 Essex car, was introduced in evidence as "Defendant's Exhibit No. 59."

The hose and coupler, here in evidence as Defendant's Exhibits Nos. 7-B and 7-C respectively, were submitted to the witness, who stated he purchased this hose and coupler from the Alemite Lubricator Co., 16th & Fairmount Ave., Philadelphia, Pa.

He went there on January 4, 1928, took a pump with him, which is now connected to that coupler. The pump was full of grease and he gave it to the man back of the counter and asked him to put a hose on it, a hose and coupler. He took it back of a screen, into what looked like an office, and talked to a man there. He then came back and filled the order. The witness paid him $2.00.

The witness identified the receipt for that purchase. The receipt of the Alemite Lubricator Co. for the Alemite hose and coupler, Exhibits 7-B and 7-C respectively, was introduced in evidence as Defendant's Exhibit No. 60.

The witness purchased, also, so-called Zerk nipples or grease cups that morning, January 10, 1928, at the Alemite Lubricator Co., 16th St. & Fairmount Ave., Philadelphia.

(Witness produces the four grease cups so purchased.)

The four Zerk nipples or grease cups purchased from the Alemite Lubricator Co. were introduced in evidence as Defendant's Exhibit No. 61.

Q.21. You also have a sales receipt accompanying these purchases?

[fol. 270] (Witness produces sales receipt for these four Zerk grease cups.)

The sales receipt for the purchase of four Zerk nipples was introduced in evidence as Defendant's Exhibit No. 62.

No cross-examination.

Mr. Roderick W. Smith, called on behalf of defendant, upon direct examination, testified as follows:

His name is Roderick W. Smith; his residence is 28 Jefferson Ave., Haddonfield, N. J.; his age is 34. His occupation is District Sales Manager of the R. M. Hollingshead Co. He is thoroughly familiar with the products of the R. M. Hollingshead Co. He is familiar with their sales activities.

Q. 5. What is the general character of business of The R. M. Hollingshead Co.?

By Mr. Hansmann: I object to the question as immaterial to the point at issue.

A. The manufacture and sale of automobile chemical products. Some of the more important products of The R. M. Hollingshead Co. are: soap, grease, anti-freeze, patches, polish, and top dressing. The R. M. Hollingshead Co. has never engaged in the manufacture of mechinical equipment as to his knowledge. They have sold mechanical equipment in connection with their products, such as the Whiz high pressure chassis lubricator.

The witness identified the device here in evidence as Defendant's Exhibit No. 8 as the high pressure chassis lubricator of The R. M. Hollingshead Co. It is a machine used for lubricating the chassis of an automobile with grease.

The reason for the merchandising of such a piece of mechanical equipment is that the coming of the service station as a medium for greasing cars demanded such an

equipment. The automobile service station constitutes a very large part of the Hollingshead Company's market, or outlet for their goods. The item of grease or lubricant constitutes one of the most important products of the Hollingshead Co. from the standpoint of sales.

[fol. 271] Q. 15. Will you please just describe in a general way what the various lubricant products of your company are and how they are marketed?

By Mr. Hansmann: I object to this line of testimony on the ground that it is immaterial to the issue. With consent of defendant's counsel I make this a standing objection to all testimony relative to the extent of defendant's grease business.

A. Whiz gear grease, high pressure chassis lubricant, and Whiz penetrating oil. These products are marketed through garages, service stations primarily. Some business is done with the larger fleet truck owners direct.

Whiz gear grease is designed to lubricate the transmissions of automobiles. Whiz high-pressure chassis lubricator is designed to lubricate the spring and chassis bearings of automobiles.

Both of these greases must be applied by the ultimate user by means of some mechanical equipment. To fill a transmission case a small pump gun of some kind must be used. To lubricate the chassis of an automobile some kind of a so-called "pressure" gun must be used to force the grease through the necessary apertures or fittings on the car.

A picture was submitted to the witness, who stated that it represents and is a pictorial representation of the mechanical equipment used for dispensing the gear grease.

The unit consists of a pump and truck. The truck supports the container filled with grease as furnished by The R. M. Hollingshead Co. The pump screws into the top of the drum with a pipe that reaches to within a half inch of the bottom of the drum. Turning the handle on the pump sends grease from the drum, through the hose, to the nozzle on the end of the hose that is inserted in the opening of the transmission case.

The printed matter so identified was introduced in evidence as Defendant's Exhibit No. 63.

The various fittings found on automobiles and into which must be forced the chassis lubricant or grease are the Alemite, Zerk and Dot fittings. These three different types or makes of fittings or grease cups constitute a very great portion of the fittings found in the automotive field.

There is no other substantial outlet or use for the Hol- [fol. 272] lingshead Co.'s chassis lubricant or grease, other than to be placed or dispensed into these various makes of grease cups or fittings.

This Whiz high-pressure chassis lubricator was first adopted in the business of the R. M. Hollingshead Co. in the Fall of 1925. Prior to that time the sale of high pressure lubricant was very large in three and five pound cans, and was sold to the dealer who in turn would sell it to the ultimate user. Accompanying the delivery of an automobile there was, in the past, a small hand gun which could be used as a means of lubricating the car. The hand gun was loaded with grease from the three or five pound container. Prior to the advent of the Whiz high pressure lubricator our sales were larger through this medium.

There was a change in the grease market due to the fact that service stations became more numerous and expanded in their useful endeavor. They advertised to the ultimate used a greasing service attractive enough to cause many users to discontinue servicing their own cars with grease. A demand was created by the service station for a dispensing equipment that would make it easier for them to service cars with Whiz grease. The small hand gun apparently did not take care of the requirements of the service station which was servicing many cars a day.

Q. 26. Is this one of those small hand guns you speak of, or is it similar to those which you stated came with the car?

A. It is.

(Defendant's counsel submits to witness the Alemite Screw-type hand compressor, Exhibit 7).

Q. 27. Did the Hollingshead Co. at any time sell any grease cups or fittings, either of the Alemite or the Zerk type for use on automobiles or any other machinery?

A. Only the fitting found on the back end of a Dot connection, the purpose of which was to fasten the connection on to the hose of the high pressure chassis lubricator.

Q. 28. Did your company at any time, however, sell grease cups or fittings of any form whatsoever for the purpose of installation directly on bearings of the car?

A. They did not.

Q. 29. Or any other machinery?

[fol. 273] A. They did not.

Q. 30. Why not?

A. Because our business is the manufacture of automobile chemical products and not mechanical equipment.

The distribution of this high-pressure chassis lubricator was essential to the Hollingshead Co. in their sale of their products, that is, grease.

The witness identified a "Dot" connection for high pressure chassis lubricator, which was sold by the Hollingshead Co. in connection with their lubricator. The purpose of this "Dot" connector is to go on the so-called "Dot fitting" that is found on certain types of automobiles.

The device so identified as the Dot Adaptor or connector was introduced in evidence as Defendant's Exhibit No. 64.

The witness is aware that a Preliminary Injunction has been issued against The R. M. Hollingshead Co., enjoining the sale of their chassis lubricator dispensing equipment. The Hollingshead Co. is not now engaged in the sale or distribution of any chassis lubricating dispensing compressors or equipment since about March, 1927.

The Hollingshead Co.'s sales of chassis lubricant or grease have been affected by their discontinuance of chassis lubricating equipment or compressor; they have fallen off in volume because of their inability since March to furnish equipment required by the service station to service cars with their high pressure lubricant.

Q. 42. Do you have any competitors in the lubricating field so far as your chassis lubricant is concerned?

The Hollingshead Company's greatest competitor in this grease business is the Alemite Co. That is the same as the Bassick Co., although it is known in the trade as the Alemite Co. They sell a chassis lubricant to the same trade, that same general trade or field to which the Hollingshead Co. sells its chassis lubricant. The Alemite Company likewise competes with the Hollingshead Co. on their other grease, with the transmission lubricant.

A device, in evidence as Defendant's Exhibit No. 41, was submitted to the witness, who identified it as an end piece sold by The Hollingshead Co. as a part of the high-pressure chassis lubricator when its sale was first started. Only [fol. 274] a few of them were sold for a very short period. When Hollingshead discontinued this particular end piece or coupler a small hose or an end piece that had slots on either side was used, instead of the slotted key coupling now found at the extreme end.

The coupler last employed by the Hollingshead Co. is the type of Defendant's Coupler in evidence as Exhibit No. 8-C.

The witness identified defendant's Exhibit No. 6 as the "No. 20 high pressure hand gun," formerly marketed by the Hollingshead Co.

The gear grease dispensing truck, pump and hose (Exhibit No. 63) was merely bought and resold by the Hollingshead Co. None of the lubricant dispensing equipment, as for instance, the high pressure compressors which are here in evidence as Defendant's Exhibits 6 and 8, were actually made by the R. M. Hollingshead Co.

The witness then identified an invoice covering the purchase of the Dot lubricators by the R. M. Hollingshead Co. from the Dot Lubricator Co., which are in evidence here as Exhibit No. 64.

The invoice of the Dot Lubricator Co. was introduced in evidence as Defendant's Exhibit No. 65.

The witness identified an invoice for the purchase of 350 Dot adaptors by The R. M. Hollingshead Co. from the Dot Lubricator Company, likewise covering the same Dot adaptors or connectors before identified.

This last invoice was introduced in evidence as Defendant's Exhibit No. 66.

The witness identified invoices from the Alemite Lubricator Co. covering 500 and 100 Alemite straights (grease cups) sold to The R. M. Hollingshead Co. These invoices cover the same Alemite pin fittings which were made part of the Dot adaptor which is here in evidence as Defendant's Exhibit No. 64.

The last two invoices for Alemite pin fittings was introduced in evidence as Defendant's Exhibits 67-A and 67-B respectively.

The witness identified the device here in evidence as Defendant's Exhibit 45, as a Zerk nipple, to be used in connection with greasing automobiles having a Zerk system. It is used in connection with Whiz high-pressure lubricators.

[fol. 275] Upon cross-examination, Mr. Roderick W. Smith testified as follows:

He sold these lubricators. They were not sold independently of the grease. They were sold in connection with grease, each lubricator containing thirty pounds of grease, and was accompanied by a quarter drum of grease as part of the sale price. The sale price of this lubricator with its filling of grease and the accompanying drum of grease was higher than the sales price of a corresponding quantity of grease alone.

The hand compressors forming Defendant's Exhibit No. 6 were sold accompanying the sale of the quarter drum of the grease. The sale price of such a sale was not higher than the sale price of a quarter drum of grease alone; in fact, the hand compressor was given with a quarter drum of grease.

Upon redirect examination, Mr. Roderick W. Smith testified as follows:

A drum contains approximately 450 pounds of grease. A half-drum contains 300 pounds; and a quarter-drum, 160 pounds net.

The Alemite Company or the Bassick Company put up grease in generally similar sized containers. The Bassick Co. or the Alemite Co. likewise sell their high-pressure lubricating compressors along with their grease.

R. D. Q. 5. Would you consider it any handicap to the sale of your chassis lubricant if your automobile trade, service station trade, could no longer be supplied by you with any chassis lubricating dispensing equipment?

A. I would.

By Mr. Hansmann: Same objection.

R. D. Q. 6. Why?

By Mr. Hansmann: By consent of defendant's counsel, plaintiff's attorney makes the standing objection to redirect examination which does not follow along the lines of the cross-examination.

A. Because the service station today must have a dispensing unit capable of handling a large number of cars promptly. Our inability to furnish such a unit causes the service station to seek other markets for such a unit, and purchase grease from such markets, rather than from us. For example, it is exactly the same as buying a can of sardines with an opener. The trade will naturally go to the manufacturer who furnishes an opener with his sardines. [fol. 276] That is an illustration of our present position.

R. D. Q. 7. Are you aware that the Bassick Mfg. Co. or the Alemite Co., as you have called it, is also in the business of selling high-pressure service compressors to the garage and service station trade?

A. I am.

R. D. Q. 8. Why would it not fulfill all your needs to have the service station trade supplied with the chassis lubricant dispensing service compressors of the Bassick Mfg. Co.?

A. Because the sales representatives of the Alemite Co. bring pressure to bear upon the dealers that their chassis dispensing equipment will work most effectively.

No recross-examination.

Defendant gives notice of the taking of the testimony of the witness Harold Alfred Southgate at Audubon, N. J., forthwith.

Testimony of Harold A. Southgate

Mr. Harold A. Southgate, called on behalf of defendant, testified as follows:

His name is Harold Alfred Southgate; his age is 44; his address, 29 E. King's Highway, Audubon, N. J.; occupation, garage owner.

His experience in connection with mechanical arts, particularly lubrication, is for six years, in his garage. His previous training is: Assistant chief draftsman to the Grand Trunk Railway of Montreal, Canada. Chief army ordinance for the war department. Special sales repre-

sentative for the Emergency Fleet Corporation. Since that, garage owner.

He is familiar with lubrication of machinery, particularly lubrication of automobiles. He has specialized in the lubrication of automobiles six years. He never employed any help; always lubricated the automobiles himself. He is familiar with the various different forms or styles of lubricating apparatus used on automobiles, such as the Alemite, Zerk, Dot and the oil system. They are the three principal lubricating systems on the cars today.

He employs an "H-15" high compressor for the lubrication of the Alemite fittings. The Alemite twist gun. The Alemite have two or three different systems of a satisfactory nozzle; in the small hand guns, a nozzle that works with [fol. 277] a turn of the handle when you put the pressure on that. There is another one where you use a hose and the grease comes up.

First of all, in using the "H-15" you would turn the handle on the right hand side upwards until you got pressure. Then you would attach the coupling to the nipple on the car. Then you would press the handle down on the left hand side, thus forcing the grease through the shackle joint. If the grease goes through the shackle satisfactorily, the coupling is then unscrewed or uncoupled, and the nipple is ready for the next operation.

He is familiar with the construction of the "H-15" compressor including the coupler or nozzle of the same. He has to replenish the different parts from time to time. So far as the witness has been able to observe in his six years of lubrication experience, there is no suction or self-cleansing produced within the coupler or at the fitting when the coupler is detached from the fitting at the end of the act of lubrication. He finds the coupler on the compressor and the grease cup on the car generally not cleansed of grease, exteriorly after uncoupling. Normally there would be a slight trace of grease on the washer of the coupling; there would also be a small amount of grease on the ball of the nipple; and the nipple itself on the car will have a film of grease which collects.

The witness applied the H-15 compressor to two different Alemite fittings or grease cups on an automobile, and operated the compressor, forcing grease through the fittings and

bearings, and found that a small amount of grease was left at the south of the opening of the leather washer and grease appeared to have exuded out past the washer after uncoupling. There was a small amount of grease on the ball of the Alemite nipple, and a film of grease all around the outside of the nozzle. In practice, the witness would have to wipe every nipple before and after; wipe every nipple before he attached his gun to it, because that is one thing that wears the washers out. Most people object to having a lot of grease around the outside of the nipple and naturally he wipes it off so that it won't collect dust.

He does not believe that the construction of the "H-15" compressor which he used, or the construction of any part of it is especially conducive to a clean lubricating operation; that is, especially conducive to the removal of excess lubricant from the fitting or coupler, or both, when uncoupling.

[fol. 278] The witness' opinion that the operation of lubricating with this H-15 compressor is not a clean operation is borne out by his experience with the compressor. He has used other styles of Alemite compressors and these were no more conducive to the removal of excess lubricant from the fitting or coupler when uncoupling; they are all about the same, in his opinion.

He does not believe that any of the various Alemite compressors which he used are capable of any cleansing or particular suction at the coupler when uncoupling.

He has no interest in the outcome of this suit in which he is testifying.

Upon cross-examination, Mr. Harold A. Southgate testified as follows:

The test made with the H-15 compressor was had with a new coupling on the compressor. A coupling with a new washer would have done a cleaner job.

X Q. 3. Mr. Southgate, you did not relieve the pressure in the compressor before you uncoupled the coupler from the fitting, did you?

A. You mean by lifting up the handle?

X Q. 4. Yes, either lifting up the handle or releasing the petcock?

A. I usually lift up the handle, but I can't swear that I did it this time.

The witness had no trouble with the Alemite Lubricator Co. of Philadelphia. He did have some misunderstanding with them concerning the payment of a bill. He does not now buy Alemite lubricants from them since this misunderstanding. He does buy pin fittings from them, but not grease.

Upon redirect examination, Mr. Harold A. Southgate testified as follows:

In the normal operation of the H-15 compressor it is better to lift the lever up, especially when you have hit a hard shackle with a certain amount of pressure in the gun. If you do lift the handle, that will not eliminate the forcing out of the quantity of grease from the coupler after you uncouple. The witness can hardly explain that, unless there is some pressure still remaining in the hose. That pressure should be relieved when you lift up the hand lever which works the piston but in practice, it does not, because the grease would force out.

[fol. 279] Notary's Certificate

State of New Jersey,
County of Camden, ss:

I, Myrtle M. Pollitt, a Notary Public in and for the County of Camden, and State of New Jersey, do hereby certify that on the 10th day of January, 1928, as shown by the foregoing deposition, and pursuant to the attached notice and proof of service thereof, I was attended by Leonard L. Kalish of counsel for Defendant, and Elwood Hansmann of counsel for Plaintiff, and Harold A. Southgate, witness for Defendant, and that said witness who was of sound mind and lawful age, having been by me first duly sworn to testify to the truth, the whole truth, and nothing but the truth, gave his testimony, which was taken by the stenographer appointed by me and under my supervision, in the presence of the witness, and thereafter transcribed upon the typewriter also under my supervision; and said deposition was then read by the witness and subscribed by him.

I do further certify that I am not attorney or of counsel, nor related to any of the parties to his cause, nor in any way interested in the event of the cause named herein.

In testimony whereof, I have hereunto set my hand and seal this 19th day of January, 1928.

(Sgd.) Myrtle M. Pollitt, Notary Public for New Jersey. (Seal.) My commission expires May 19, 1929.

Testimony of Clifford L. Jones

CLIFFORD L. JONES recalled on behalf of defendant, testified as follows:

The witness identified a book as the advertising portfolio that Alemite salesmen had in the latter part of 1925 and early part of 1926, showing the different ads of the Bassick Mfg. Co. appearing in the Saturday Evening Post, copies of which appear in the booklet. It was published by the Bassick Mfg. Co.

By Mr. Hansmann: I object to the testimony as immaterial. The Alemite portfolio of advertisements was introduced in evidence as Defendant's Exhibit No. 68.

[fol. 280] The witness identified a photostatic print as a copy of the ad appearing in the Saturday Evening Post on August 20, 1927, advertising an Alemite Lubricant and a new Alemite 100% service sign.

The last photostatic print was introduced in evidence as Defendant's Exhibit No. 69, with the qualification that Defendant also makes profert of the original of which this is a photographic reproduction.

The witness identified a photostatic copy of the "Alemite Transmission Lubricant" booklet, dealing with Alemite lubricants, as to why you should use them; why they prove better, together with the lubricant agreement; copy of which was given to prospective purchasers.

This is a copy of the publication of the Bassick Mfg. Co.

A. So far as I know, yes.

By Mr. Kalish: I offer in evidence this last book entitled "Alemite Transmission Lubricant" as Defendant's Exhibit No. 70.

By Mr. Kalish: The submission of all photographic reproductions of publications is made subject to Defendant's

profert of the originals of which the instant exhibits are photostatic copies.

The witness identified a photostatic copy of the book given to the salesmen, entitled "Why There's a Few Cents Difference in Lubricants," dealing with the manufacture of cheap and better grades of lubricant, comparisons of lubricants, tests, and so forth. It is a copy of the publication of the Bassick Mfg. Co.

The last photostatic copy of book was introduced in evidence as Defendant's Exhibit No. 71.

The witness identified a photostatically reproduced book as being a true copy of the book entitled "Industrial Opportunities," dealing with opportunities in the industrial field, why they should tie up with Alemite and so forth, which the regular lubricant salesman (Alemite) had before the industrial department was organized here in Philadelphia by the present Alemite Lubricator Co. of Eastern Penna. It is a copy of the publication of the Bassick Mfg. Co.

[fol. 281] The last photostatically reproduced book entitled "Industrial Opportunities" was introduced in evidence as Defendant's Exhibit No. 72.

The witness identified another photostatically reproduced book as a copy of the "Alemite High Pressure," a booklet issued by the Bassick Mfg. Co. in the interests of service stations and Alemite dealers. Sent to them monthly, giving the various experiences of different service stations throughout the territory, together with advertisements of products.

The booklet entitled "Alemite High Pressure," was introduced in evidence as Defendant's Exhibit No. 73.

The witness identified another book called "Alemiteing—A Profitable Business." It was given to the salesmen for distribution where they saw fit, and dealt with the story of good, bad and indifferent lubricants compared with the Alemite, and why you should use it. It is a publication of the Bassick Co.

The book so identified was introduced in evidence as Defendant's Exhibit No. 74.

The witness identified another photostatic reproduction of two pages of a publication as a true copy of the pamphlet that is wrapped around the small hand operated guns that are dispensed in tool boxes and on sale all over the country. This pamphlet deals with the care of the gun and the hose, and gives a layman a little knowledge of how to use the gun. In other words, it is an instruction pamphlet.

The photostatic reproduction of the publication was introduced in evidence as defendant's Exhibit No. 75.

The witness stated that he is familiar with both the Alemite, as well as the Zerk type of lubricating equipment. As far as the witness knows, the Zerk type of lubricating equipment was marketed first by the Allyne Zerk Co. from Cleveland.

When the Zerk lubricating equipment was marketed by the Allyne Zerk Company it was sold in competition with the Alemite Lubricating Equipment. As a lubricating device, it is a device for lubricating the chassis of an auto- [fol. 282] mobile and naturally was sold in competition with the Alemite.

Q. 17. I now quote from page 3 of "Industrial Opportunities" here in evidence as Exhibit No. 72, as follows: "A competing lubricating system is now strong in New England—they must not become a factor elsewhere." Do you have any knowledge as to what lubricating system is referred to in this statement?

A. In my opinion the statement refers to the Dot Lubricator made by the Carr Fastener Co.

Q. 18. Where were they located?

A. They were located in New England, Cambridge, Mass., I believe.

Q. 19. Are you familiar with the Dot lubricator equipment?

A. I have come in contact with it.

Q. 20. When did you come in contact with it?

A. Previous to the time it was purchased by the Bassick Co., approximately, well, from the time I first entered the Alemite service until around the middle of 1926, so far as my memory serves me.

Q. 21. Well, you state that from the time you entered the Alemite service until about the middle of 1926 you met this Dot lubricator equipment in competition. Do you

mean that this Dot lubricator equipment competed with the Alemite and the Zerk lubricating equipment?

A. Yes.

Q. 22. What happened about the middle of 1926 that eliminated this competition of the Dot Lubricator equipment?

A. The Bassick Mfg. Co. purchased the Dot, insofar as it applied to the automotive field, and put them off the market, in other words.

Q. 23. Mr. Jones, was the Dot Lubricating Equipment ever, so far as you know, installed as standard equipment on any automobiles or trucks?

A. Yes, it was installed as standard equipment.

Q. 24. Could you enumerate any automobiles or trucks upon which the Dot lubricating system was standard equipment?

A. It was standard equipment for approximately a year on the Oldsmobile. It was standard equipment on the Pontiac when it first came out. It was standard equipment on another car of which I can't think at the present minute. [fol. 283] Oh, yes, it was standard equipment on the Oakland for a year at the same time as the Oldsmobile.

Q. 25. Was it the standard equipment on any trucks, commercial trucks, so far as you know?

A. I don't recall any.

Q. 26. So far as you know, is the Dot lubrication system standard equipment on any automobiles or trucks as they are being put out at present?

A. No.

Q. 27. I now hand you a photostatic reproduction of a notice, a paper, and ask you if you are familiar with it, what it purports to be, and whether it is a true copy of what it purports to be?

A. This is a card that was used by the Dot lubricating division of the Carr Fastener Co. at the time subsequent to the purchase of the Dot equipment. It was used in the automotive field by the Carr Fastener, and was sent to different dealers after that purchase, announcing the fact that they had withdrawn from the automotive field. I saw a copy of such a card in dealers' places of business.

By Mr. Kalish: I offer in evidence this last paper as Defendant's Exhibit No. 76.

Q. 28. Mr. Jones, in your work with the Alemite Lubricator Co., what were the various products which you sold, what were the various Alemite products which you sold?

A. Do you want me to enumerate them?

Q. 29. In classes.

A. They were the lubricating devices, the air guns, the hand guns, the lubricants, the gascolators, the pin fittings, both Alemite and Zerk. Of course that covers the pumps which comes under the heading of lubricants. Then the hose, the hose couplings, fittings, all come under one head.

Q. 30. Mr. Jones, was the sale of the lubricants any material part of your total sales or activities?

A. Oh yes, the sale of lubricants was your bread and butter. That is what the salesmen looked upon it as, because the lubricant was repeat business. The sale of the gun was a one-time affair. The lubricant being a consumable item was naturally repeat stuff and we went after that business, insofar as I personally was concerned.

By Mr. Hansmann: I object to the question as immaterial.

[fol. 284] Q. 31. Mr. Jones, on the last page of the book of the "Alemite High Pressure" of June 19, 1927, there appears a sign reading: "We use Genuine Alemite Lubricant—Alemite-ing costs No More Than Ordinary Greasing." Will you state briefly what that sign was and what its connection was with either the Alemite lubricating equipment or the Alemite lubricant?

A. That sign was a new 100% service sign and was given to dealers who only used Alemite lubricants. It was intended to distinguish that service station from the ordinary greasing station.

Q. 32. Was it used primarily to distinguish the service stations that used genuine Alemite lubricating equipment and those that used other lubricating equipment?

A. The sign was only given to the service station that used only the Alemite lubricating equipment. If they did not use all Alemite lubricant in equipment, they would not get the sign.

Q 33. What sort of a sign was this?

A. It was a 3 x 8 sign made of metal, bordered with wood, yellow background with blue letters.

Q. 34. On the copy of the advertisement which is here in evidence as Exhibit 69 there also appears a picture of a similar sign. The only difference apparently is that the

word "lubricant" in this last sign, which appeared apparently in August 1927, the word "lubricant" has been pluralized. What is the significance, if any, of that change? So far as you know?

A. I can only state from the point as made in Philadelphia, and that was when the sign first came out we gave it with chassis lubricant. Later on it was pluralized, and we were told it was pluralized for the purpose of only giving it to those who used both lubricants, chassis and gear lubricants.

Q. 35. Is the gear lubricant dispensed through or applied by the Alemite lubricating system?

A. Do you mean when you say "lubricating system" the guns like this H-15?

Q. 36. I mean just those which connect on to the Alemite fittings or the Zerk nipple.

A. The Bassick Mfg. Co., the salesmen, and everyone else did not intend that the gear grease should be dispensed by that means at all. They have other means for dispensing it.

[fol. 285] Q. 37. How is the gear grease dispensed?

A. The gear grease is dispensed by means of a vacuum pump which is attached to the drum and the pump, one turn pumping so many pounds or so much of a pound at the complete turn of the handle. It is a vacuum pump known as the Marvel equipment, or Marvel pump equivalent.

Q. 38. This gear grease dispensing pump, therefore, apparently had no connection with the Alemite or Zerk fittings or nipples. Am I correct in that?

A. You could not put lubricant of any kind into an Alemite or Zerk fitting by means of the gear lubricant pump or the Marvel pump.

Q. 39. Why?

A. Well, in the first place you could not put the nozzle of the pump on the fitting. The pump is so constructed that there is a closing device at the end to open when you want to pump out lubricant to the gear cases and close it when you have finished, and that prohibits the placing of that nozzle on the pin fittings.

Direct examination closed, no cross-examination.

Notary's Certificate

STATE OF PENNSYLVANIA,
County of Philadelphia, ss:

I, Nettie Bussinger, a Notary Public in and for the Commonwealth of Pennsylvania, acting as Special Examiner, do hereby certify that on the 4th, 5th, 6th, 7th, 9th, 10th, and 11th days of January, 1928, as shown by the foregoing depositions and pursuant to the attached notice and proof of service thereof, and also pursuant to the notice on the record, I was attended by E. Hayward Fairbanks and Leonard L. Kalish of counsel for Defendant and Elwood Hansmann of counsel for Plaintiff; and Hugo C. Gibson, Clifford L. Jones, Louis Nucho and Roderick W. Smith, witnesses on behalf of Defendant, at 1232 Chestnut Street, Philadelphia, Pennsylvania, and that said witnesses, who were of sound mind and lawful age, having been by me first duly sworn to testify to the truth, the whole truth and nothing but the truth, gave their respective testimony, which was taken down in shorthand by stenographers appointed by me and under my supervision, in the presence of the respective witnesses, and thereafter transcribed upon [fol. 286] the typewriter also under my supervision, and the said depositions were then read over by the respective witnesses and subscribed by them; and that the several exhibits offered in evidence were marked for identification as appears in the deposition.

I do further certify that I am not attorney or of counsel, nor related to any of the parties to this cause, nor in any way interested in the event of the cause named herein.

In testimony whereof I have hereunto set my hand and seal this 25th day of January 1928.

Nettie Bussinger, Notary Public. My commission expires March 2, 1929.

[fol. 287] IN UNITED STATES DISTRICT COURT, WESTERN DISTRICT OF TENNESSEE

Equity No. 935

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE R. M. HOLLINGSHEAD COMPANY, Defendant

NARRATIVE OF THE TESTIMONY TAKEN BEFORE HIS HONOR, JUDGE HARRY B. ANDERSON, PRESIDING AT THE TRIAL ON APRIL 26TH, 27TH AND 28TH, AND THEREAFTER CONTINUED ON MAY 24TH AND 25TH, 1928, IN THE CASE OF THE BASSICK MANUFACTURING COMPANY, PLAINTIFF, VS. THE R. M. HOLLINGSHEAD COMPANY, DEFENDANT, EQUITY NO. 935, A CAUSE PENDING IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TENNESSEE, WESTERN DIVISION

Offered in behalf of the defendant a certified copy of certain papers in the case of The Bassick Manufacturing Company, plaintiff, vs. The Frank Miller Company, a cause pending in the United States District Court for the District of New Jersey.

Offered in behalf of the plaintiff a certified copy of the notice of the motion to dismiss in the case of The Bassick Manufacturing Company vs. The Frank Miller Company, the affidavits of J. E. Otis, Jr. and Elwood Hansmann in support of said motion, a certified copy of the certificate of incorporation of The Frank Miller Company and a certified copy of the order of dismissal by Judge Bodine, marked "Plaintiff's Exhibit No. 1."

ALBIN C. AHLBERG, Plaintiff's Witness:

I am a lawyer, thirty-one years of age, reside at Chicago, Illinois, and am connected with the firm of Williams, Bradbury, McCaleb & Hinkle, who represent The Bassick Manufacturing Company, the plaintiff. In behalf of The [fol. 288] Bassick Manufacturing Company on February 28, 1928, I attended the United States District Court for the District of New Jersey before Judge Bodine and presented a motion to dismiss the suit of The Bassick Manufacturing

Company vs. The Frank Miller Company, Equity No. 2759. I became familiar with the papers filed in conjunction with the motion and can identify and submit the affidavits filed by the defendant, The Frank Miller Company, in opposition to the motion to dismiss.

Papers offered in evidence as Plaintiff's Exhibit 2.

In the Frank Miller case there was a hearing upon plaintiff's motion for a preliminary injunction on November 29, 1927, at which time there was a suggestion by the court that the hearing proceed to a final hearing. Following the argument of the preliminary injunction motion on November 29, 1927, there was filed by plaintiff voluminous affidavits and by defendant numerous exhibits. I would say that the case was not submitted upon the merits on validity and infringement to Judge Bodine. There was correspondence and an agreement was reached between counsel in the latter part of February, 1928, that briefs be filed in the Frank Miller case on March 5, 1928, but they were never filed.

Cross-examination:

The proofs upon the merits had been filed but not completed when the motion to dismiss was presented to Judge Bodine on February 28, 1928. I say that the proofs were not completed, for the reason that Mr. Kalish, counsel for the defendant, had served notice upon plaintiff's counsel that defendant was to ask leave of court on February 28 to file a lot of additional exhibits that had not theretofore been introduced in evidence. The plaintiff had introduced its proofs and the only thing incomplete so far as I know was the matter of some exhibits which the defendant wanted to file. When the preliminary injunction motion was heard in November, there was an argument, and there were before the court very voluminous affidavits and counter-affidavits filed by both parties. Both parties agreed that the case should be treated as of final hearing.

I made the motion to dismiss the bill without prejudice before Judge Bodine. It was a written motion supported by the affidavits filed. I was one of counsel for The Bassick Manufacturing Company in the New Jersey litigation, [fol. 289] and was familiar with the pleadings and proof in the case. Opposing counsel were present at the motion to dismiss without prejudice before Judge Bodine, and there

was an argument whether plaintiff had a right to dismiss its suit without prejudice. The court stated that he was not deciding the merits of the case, but that the plaintiff had a right to dismiss its bill. I had drawn an order wherein the words "without prejudice" appeared. The court said he would grant the order omitting the words "without prejudice." Whereupon I suggested that omitting the words "without prejudice" would only preclude the plaintiff's right to recover profits and damages up to that date, and to that the court agreed. The court struck out the words "without prejudice" in the order and signed it.

What I wanted was the order or decree to recite that the dismissal was without prejudice, but under the direction or action of the court I struck out the words "without prejudice."

I made no exception to the action of the court in striking out the words "without prejudice" or directing them to be stricken, and no appeal has been taken to the Circuit Court of Appeals for the Third Circuit to determine the correctness of Judge Bodine's action in striking out the words "without prejudice".

The court made a statement that it was his impression that the patent could not be sustained as against The Frank Miller Company devices, but it was not my impression at all that if we had gone on with our case and we had filed briefs that he would have dismissed our bill.

"Q. You were then there and you thought he would sustain your bill?

A. I took the liberty——

Mr. Williams: If the Court please, I don't see that this is germane, and what counsel's impression of what the Court might do after he had heard the case, it seems to me, is rather incompetent.

The Court: Well, the impression of counsel on either side of what the court would have done is immaterial. All we consider is what the court did do. Here's some kind of a suit filed in New Jersy. What it was, I haven't found out yet, but there was evidently a suit for infringement of a patent and application for a preliminary injunction, which I gather was treated also as a final hearing, the withdrawal of the suit by the plaintiff, and the words 'without prejudice' stricken out.

[fol. 290] Mr. Williams: No question about that.

Mr. Burch: That is what the record shows.

Mr. Williams: Now, the question is what the counsel's impression was of what the Court would have done on the merits if proofs had been submitted?

The Court: I don't think the opinion of counsel of what the Court would do would be of any value.

Mr. Burch: I will not pursue that, your Honor, because on my theory all this parole evidence is inadmissible.

The Court: Mr. Williams stated that record was not complete and this evidence was introduced more in the nature of supplementing the record.

Mr. Burch: The record contains everything that we conceive is necessary to present to your Honor, that is, the bill, the answer, the motions and affidavits in support of the motion and the decree. Your Honor is not concerned with the evidence in the New Jersey case at all, and the authorities are these are the papers, the ones to which I have just referred, to which a Court looks on the presentation of the defense of res judicata.

The Court: There are just two things for me to look at on this motion, as I conceived it. If I am wrong, I hope counsel will correct me. First, w*hat* this the same subject-matter? Secondly, what is the effect of this decree of dismissal?

Mr. Burch: I think that is the question.

The Court: Without containing the words "without prejudice," that being stricken out, I take it would be exactly the same as though the order had been originally drawn dismissing the suit without prejudice—whether that is a decree on its merits.

Mr. Burch: We are prepared to argue that."

Redirect examination:

The court said at the hearing upon the motion to dismiss that he was not at that time deciding the case, and he told the court reporter who was present in chambers at this rather informal discussion not to make any transcript of what was said there, either by the court or otherwise. There were no opinions filed or reported by Judge Bodine on the merits of the case.

[fol. 291] Testimony of O. A. CUMMINGS stipulated.

At the suggestion of counsel for the defendant, it was stipulated that the affidavit of O. A. Cummings, dated September 13, 1926, and the exhibits identified therein, may be taken as in evidence to have the same force and effect as though introduced by the testimony of the witness.

It was similiarly stipulated that the affidavit of D. A. Beezley and the exhibits submitted in connection therewith, filed in support of plaintiff's motion for a preliminary injunction, be used in lieu of the testimony of Mr. Beezley; to have the same identification marks in both the Cummings and Beezley transactions as they had in connection with the affidavits.

It is stipulated that The Bassick Manufacturing Company, the plaintiff, is a corporation of the State of Delaware, the date of incorporation being March 31, 1920.

Offered in evidence in behalf of the plaintiff, Gullborg patent in suit No. 1,307,734 as Plaintiff's Exhibit 3.

Offered in evidence in behalf of the plaintiff a certified copy of the disclaimer of claim 12 of Gullborg patent No. 1,307,734 as plaintiff's Exhibit 4.

Offered in evidence in behalf of the plaintiff a certified copy of Zerk patent in suit No. 1,475,980, as Plaintiff's Exhibit 5.

It is stipulated that the plaintiff, The Bassick Manufacturing Company is vested with the whole right, title and interest in and to the Gullborg and Zerk patents in suit, numbered respectively 1,307,734 and 1,475,980.

Offered in evidence in behalf of the plaintiff as Exhibits Nos. 6 and 7, respectively, the defendant's main and reply briefs before the Master.

Offered in evidence as Plaintiff's Exhibit 8 a stipulated statement of fact by J. E. Otis, Jr., vice president and general manager of The Bassick Manufacturing Company.

Offered in evidence as part of the stipulated testimony of Mr. Otis the following exhibits:

Exhibit "A"—Alemite lubricant compressor,
Exhibit "B"—Assortment of Alemite pin fittings,
Exhibit "C"—Plaintiff's Alemite Manual,

Exhibit "D"—Plaintiff's publication, "How to Get More Alemite Business",

[fol. 292]

Exhibit "E"—Plaintiff's Alemite and Alemite-Zerk price list,

Exhibit "F"—Plaintiff's publication "Alemite Products",

Exhibit "G"—Copies of title papers to Gullborg and Zerk patents,

Exhibit "H"—Volume III of Adjudication Book,

Exhibit "I"—Drawing of Alemite and various infringing constructions,

Exhibit "I"—Drawing of O. K. rubber gasket and screw type and rubber gasket couplers,

Exhibit "J"—Petition for rehearing Larkin and O. K. cases,

Exhibit "K"—Supplemental petition for rehearing Larkin and O. K. cases,

Exhibit "L"—Petition to Supreme Court for certiorari in Larkin and O. K. cases,

Exhibit "M"—Drawing of Larkin compressor, coupler and pin fitting involved in Larkin-Chicago case,

Exhibit "N"—Copy of Larkin 1926 catalog constituting Exhibit 154 in Larkin-Chicago case,

Exhibit "O-1"—Larkin 1927 catalog referred to in May 27, 1927 order for preliminary injunction,

Exhibit "O-2"—Larkin Miniature catalog,

Exhibit "O-3"—Drawing of Larkin coupler,

Exhibit "O-4"—Drawing of Larkin coupler,

Exhibit "O-5"—Lubricant compressor and coupler like Exhibit "G" Sawitoski affidavit referred to in order of May 27, 1927, in Larkin-Chicago case,

Exhibit "O-6"—Drawing of Larkin coupler submitted by Sawitoski and referred to in order of May 27, 1927.

Exhibit "P"—Larkin 1927 catalog referred to in preliminary injunction order of December 5, 1927 in Larkin-Chicago case,

Exhibit "P-1"—Larkin lubricant compressor and coupler of so-called small diameter type,

Exhibit "Q"—Drawing of lubricant compressor of type involved in Motor Parts Station case,

[fol. 293]

Exhibit "AA"—Photograph of White Company grease ejector,

Exhibit "BB"—Drawing of White Company grease ejector and shackle bolt.

Offered in evidence on behalf of the plaintiff the following exhibits:

Exhibit 9—Assortment of Alemite-Zerk fittings,
Exhibit 10—Alemite-Zerk compressor,
Exhibit 11—Alemite Handy-Shop compressor,
Exhibit 12—Alemite H-15 Service Compressor,
Exhibit 13—Alemite P-25 Service Compressor,
Exhibit 14—Alemite-Zerk adapters for Alemite Handy-Shop compressor, Alemite H-15 Compressor and Alemite P-25 compressor,
Exhibit 15—Exhibit J Drawing Davis affidavit,
Exhibit 16—Exhibit K drawing Davis affidavit.

Defendant's Evidence

L. B. SHIPP, Defendant's Witness.

My age is 31. I reside at 414 North Claybrook, Memphis, Tennessee. I am local manager for The R. M. Hollingshead Company, engaged in the manufacture and sale of automobile and chemical accessories. The main products are automobile transmission and differential grease, chassis lubricant, top dressing, penetrating oil, insecticides and things of that nature. Territory I cover in the sale of the Hollingshead Company's products comprises all of Arkansas, a large part of Tennessee, as far east as Nashville, over half of Mississippi, parts of Kentucky, Missouri and Alabama. The twenty men covering this territory come in contact almost exclusively with the automobile trade. I personally have first hand knowledge of the automobile trade. Prior to March, 1927, we sold chassis lubricant dispensing compressors. They are the compressor outfits I have seen in evidence here.

I have no official knowledge as to why my company sold a piece of mechanical equipment such as a grease dispensing compressor, but from the experience I gained in the sale of greases to automobile dealers, I should say that the

sustaining volume on which we operate our business comes from the sale of heavy lubricants. We have likewise found it necessary in the sale of our greases to have at least a satisfactory means of dispensing what we sold, as is the [fol. 294] case with our transmission and rear axle lubricant; and we have always had a Marvel Vacuum Pump, a very simple contrivance for taking the grease from the container and putting it into the rear axle and the transmission. Touching the practical side of the good the equipment did, it gave us the opportunity of talking 100% equipment to our dealers when we made the sale of our grease. We found it very hard to sell our chassis lubricant without having means to furnish the dealer with it to apply it to the car.

During the time we were selling this equipment, prior to March of last year, our grease sales were considerably heavier than they have been since that time. I should say that a sales organization such as ours, that is competing with another organization of equal power and intelligence, assuming that the breaks are the same, the man having the equipment with which to dispense it has an overwhelming advantage. And, of course, I feel very keenly the loss of some kinds of equipment with which to vend the grease we offer for sale.

Defendant's Exhibit 63 illustrates the grease dispensing pump or equipment we sell. It is sold at no profit. I would say that the chassis lubricant sales have fallen off at least 50% since March, 1927 when we discontinued our chassis lubricating equipment, and that the sales of gear grease have fallen off since the same time at least 33⅓%.

"Q. Mr. Shipp, I will now hand you a device marked as Defendants Exhibit No. 20, and ask you to examine it and state—this device being marked Defendant's Exhibit No. 20, Alley's Lubricating Pump. Will you please examine this and state whether in your opinion, that pump might be used in a satisfactory manner for the lubricant of bearings equipped with these so called pin fittings?

A. It looks all right to me; I would like to have it.

Q. If you had no other chassis lubricating dispensing equipment but that, would you utilize it at all?

A. I think so.

Mr. Williams: I think that is rather incompetent and speculative idea.

The Court: Yes, I will admit it.

Q. Mr. Shipp, in the sale of your chassis lubricants, does it make any particular difference to you whether — sold [fol. 295] this pump or any other pump for dispensing your grease?

Mr. Williams: I object to that as irrelevant, immaterial and incompetent. The fact is, they sold the thing we complained of, and speculation as to whether it would make a difference whether he sold that or something else, it seems to me, is pretty remote from any issue here.

Mr. Kalish: All this goes, not to the question of infringement, not to the validity of patents, but to the scope of the monopoly contended for, and the device herein exhibited is a reproduction of the prior art, and forms a substantial basis of the defendant's contention that the scope of the monopoly is not what the plaintiff contends for.

The Court: All right; go ahead and answer the question.

(Question read.)

The Court: It seems to me the answer on that is obvious. If he had any kind of a pump that distributed grease over the car, it wouldn't make any difference what kind of a pump he had.

A. I will answer it the same way.

The Court: All it means is a pump that would connect with the cars is why it is necessary to have a pump to sell the grease.

Mr. Kalish: That will be all."

Cross-examination:

When I say it wouldn't matter in our sale of chassis lubricant whether you had this so-called pump or that in referring to the Defendant's Exhibit No. 20 (Alley's devise) which you examined, it depends on what kind of fittings a car had whether I meant that so far as the compressor or pump and coupler were adapted to co-operate with the Alemite pin fittings of The Bassick Manufacturing Company, it would make no difference. I know a large number of cars are equipped with Alemite or Alemite-Zerk fittings of The Bassick Manufacturing Company. I know of one that doesn't have any high pressure fittings attached to it. I know of one car that had the Dot system, or did have it, but I do not know whether they do now or not.

The Oakland did, but I don't know whether it was in 1924, I don't know positively whether the Oakland car had Dot fittings since 1924.

[fol. 296] We wanted to be able to sell a gun that could be used with the fittings on the cars, and it didn't matter what pump it was, so long as it had a coupler that was adaptable for use with Alemite or Alemite-Zerk fittings. The sale of the Hollingshead compressor equipment shown in Defendant's Exhibit No. 63 does not involve the use of either Alemite or Alemite-Zerk or other high pressure fittings. The Hollingshead Company sold either with or without profit, or gave away devices like those shown in Defendant's Exhibit No. 63 since I have been with them four years, since the beginning of 1924. At the present time we are giving them away to help the sale of our gear grease. The Hollingshead Company either sold or gave away compressor outfits prior to my connection with the company, but I have no personal knowledge of it having been done before 1924.

When I speak of gear grease or differential grease, the sales of which have fallen off some 33⅓% since March 1927. I refer to greases which go into differential cases and transmission cases, and those greases go into cases through large holes which are not equipped with Alemite or Zerk or any high pressure fittings, so that the sales of greases in which neither Alemite nor Zerk are in any way involved have also fallen off 33⅓%, during the same period the sales of chassis grease have fallen off 50%, approximately. I would estimate the sales of both have fallen off 33⅓% and the gun 50. Well I have no figures at the office at all.

Redirect examination:

The reason for the dropping off of the sales of gear grease is that dealers prefer to buy one grease where they buy the other. They don't like to open two accounts for greases so nearly for the same purpose. There is no reason why our grease cannot be used with an Alemite gun. All grease manufacturers or grease selling companies either sell or give a compressor away. Most of them lend or give them away, which means the same thing.

Recross-examination:

Other dealers give no chassis lubricant dispensing equipment away that I know of. I know of no other manufac-

turers of grease who sell or give away dispensing equipment—what may be called a gun or compressor—for putting chassis lubricant into bearings, either through Alemite or Zerk fittings.

[fol. 297] Redirect examination:

Our sales organization in its contact with the trade has experienced difficulty in selling our grease as against the grease of The Bassick Manufacturing Company known as Alemite grease. Numerous cases come up every week where my salesmen lose a sale in a large measure because the Alemite people tell our customers if they use our grease in it they withdraw their guaranty on the sale of the gun. Mr. John T. Mahoney in Memphis has experienced trouble in that way.

Recross-examination:

The Hollingshead Company sold its soap and its grease and its top dressing and so on, in pound and five pound cans for many years. These things were sold mainly to automobile owners for use by themselves. I have known the time when automobiles were equipped with old fashioned grease cups it was the custom for the individual car owner to buy a one pound can of Hollingshead Company grease, and with his finger or knife blade fill his own grease cups. I know it has become more the custom now than it was in 1924 or before for people to have their cars greased at public service stations rather than at home in the back yard. There were other people that sold bulk lubricants that were used at filling stations and garages in a large measure, but that was not a large part of our business. Our business was mainly one pound tins to go in hardware and accessory stores, but we have always sold a large amount of gear grease and other things with it. The trend has been away from one or three pound cans and towards bulk grease, but we are not losing out on that account.

Plaintiff's Rebuttal Evidence

John M. McGregor, Plaintiff's Witness:

I live in Memphis. I am president and principal owner of the Alemite Lubricator Company of Memphis. It has no

connection with The Bassick Manufacturing Company. We buy our merchandise from that company and sell it. We take our own profits and stand our own losses and collect our own accounts.

I heard the testimony of Mr. Shipp, the local representative of The R. M. Hollingshead Company. I have been [fol. 298] the distributor of Alemite products in Memphis since the business first started in Memphis. My territory covers part of five different states—Tennessee and nearby states. Other than Alemite or Alemite-Zerk compressors of The Bassick Manufacturing Company, there are sold under the licenses of The Bassick Manufacturing Company for use in lubrication of automobiles or other machinery equipped with Alemite and Alemite-Zerk fittings, the compressor outfits of United States Air Compressor Company of Cleveland, Ohio, and the Ball Crank Company, of Cincinnati, Ohio. Their devices are equipped with couplers for Alemite or Zerk fittings, and they are available for anyone to buy and use in this territory and elsewhere throughout the United States.

We sell the compressors of The Bassick Manufacturing Company to manufacturers or merchants of grease. We sell all the major oil companies. One year I sold the Standard Oil Company of Louisiana more than $20,000.00 worth of these guns. We sell the Gulf Refining Company, the Indian Refining Company and the Pan American, in fact every large oil company here. We have never to my knowledge sold them any grease. These concerns themselves manufacture and sell grease. The compressor outfits of The Bassick Manufacturing Company and its licensee, the United States Air Compressor Company and the Ball Crank Company, are all available to be bought by any manufacturer of grease, such as I have named, and The R. M. Hollingshead Company.

Cross-examination:

The grease manufacturers and oil companies referred to use them at all of their service stations, and they use them in their own establishments to lubricate their own equipment. They use these compressors in service stations owned by them. I know that the oil companies bought compressors from us to be resold by them to the purchasers of

their grease, to the bulk purchasers of their grease outside of their own service stations. We have sold Standard Oil Company for that purpose, and I think nearly all of the companies. I know of a suit at one time pending between The Bassick Manufacturing Company and the Cincinnati Ball Crank Company, but I do not know the subject-matter of that suit.

Offered in evidence as Plaintiff's Exhibit 17 suction demonstration apparatus comprising several parts marked seriatim A, B, C, D, E, and F.

[fol. 299] Offered in evidence as Plaintiff's Exhibit 18 the original exhibits in the suit of The Bassick Manufacturing Company vs. The O. K. Manufacturing Company, one of the cases decided in 1927 by the Court of Appeals for the Sixth Circuit.

ALBIN C. AHLBERG, Plaintiff's Witness:

I have been sworn. The exhibits offered as Plaintiff's Exhibit 18 are the original exhibits in the suit of The Bassick Manufacturing Company vs. The O. K. Manufacturing Company, et al., the Sixth Circuit case referred to.

The claims relied upon are claims 1, 2, 3, 4, 5, 6, 8, 10, 14 and 15 of Gullborg patent in suit No. 1,307,734 and claims 2, 3 and 5 of Zerk patent in suit No. 1,475,980.

Offered in evidence as Plaintiff's Exhibit No. 19 transcript of argument before Judge Bodine in the case of Bassick vs. The Frank Miller Company upon motion to supplement and explain order of dismissal.

The foregoing proceedings occurred on April 26, 27 and 28, 1928, whereupon an adjournment was taken until May 21, 1928.

Proceedings were resumed on May 24, 1928.

Offered in evidence as Plaintiff's Exhibit 20 Notice and Motion to supplement and explain order of dismissal in the case of Bassick vs. The Frank Miller Company, Memorandum of Judge Bodine and appeal papers in that case.

[fol. 300] PLAINTIFF'S EXHIBIT—Filed Apr. 26, 1928

UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

Equity. No. 2759

THE BASSICK MANUFACTURING COMPANY, Plaintiff

vs.

THE FRANK MILLER CO., Defendant

MOTION

Now comes the plaintiff, by its solicitors and counsel, and moves that the above entitled cause be dismissed without prejudice, with costs to the defendant.

This motion is based upon the record and proceedings herein, upon the accompanying affidavits of Elwood Hansmann and J. E. Otis, Jr., and the exhibits submitted therewith.

French, Richards & Bradley, Williams, Bradbury, McCaleb & Hinkle, Solicitors and Counsel for Plaintiff.

Certified Copy

UNITED STATES OF AMERICA,
For the District of New Jersey, ss:

I, George T. Cranmer, Clerk of the United States District Court in and for the — District of New Jersey, do hereby certify that the annexed and foregoing is a true and full copy of the original Motion now remaining among the records of the said Court in my office.

In testimony whereof I have hereunto subscribed my name and affixed the seal of the aforesaid Court at Trenton this 13th day of April, A. D. 1928.

George T. Cranmer, by Charles S. Chvrier, Deputy Clerk. (Seal.)

[fol. 301] [Endorsed on back:] #Equity—2759. United States District Court for the District of New Jersey. The Bassick Manufacturing Company, Plaintiff, vs. The Frank Miller Co., Defendant. Certified Copy, Motion. Williams, Bradbury, McCaleb & Hinkle, 1315 Monadnock Block, Chicago. Filed Feb. 24, 1928 at 9 o'clock A. M. George T. Cranmer, Clerk. D.

[fol. 302] UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

Equity. No. 2759

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER CO., Defendant

AFFIDAVIT OF J. E. OTIS, JR.

STATE OF ILLINOIS,
County of Cook, ss:

J. E. Otis, Jr., being first duly sworn deposes and says:

I am a resident of Chicago, Illinois, and am a vice-president and the active chief executive officer of The Bassick Manufacturing Company, the plaintiff in the above entitled suit. I keep myself informed of the status of the various patent infringement suits brought by my company and am familiar with the record and proceedings herein.

I am aware that The Bassick Manufacturing Company has brought a suit in the United States District Court, for the Western District of Tennessee, Western Division, against The R. M. Hollingshead Company of Camden, New Jersey, but having a regular and established place of business at Memphis, Tennessee, for infringement of Gullborg patent 1,307,734 and Zerk patent 1,475,980 upon which the present case against The Frank Miller Co. is based. I am aware that in the Hollingshead suit a preliminary injunction order was entered on March 21, 1927, and modified on April 20, 1927, to the extent that claim 12 was struck out of the order for preliminary injunction, as set forth in the affidavit of Elwood Hansmann.

I am making this affidavit in support of plaintiff's motion to dismiss the suit against The Frank Miller Co. without prejudice and with costs to the defendant.

On Thursday, February 9, 1928, I received a visit from Mr. R. M. Bagley, vice-president of The R. M. Hollingshead Company, Camden, N. J., and during my interview with him we discussed the suit which The Bassick Manu-
[fol. 303] facturing Company brought against The R. M. Hollingshead Company. Mr. Bagley informed me that

The Frank Miller Co. of Camden, N. J., was and is a subsidiary of The R. M. Hollingshead Company, it having been purchased by the Hollingshead Company a few years ago for the purpose of selling the jobbing trade under a different brand the same products which the Hollingshead Company sells to the dealers direct. My interview on February 9 with Mr. Bagley was the first intimation that I had received that The R. M. Hollingshead Company owned or controlled The Frank Miller Company, which The Bassick Manufacturing Company had sued for patent infringement in a case involving substantially identically the same lubricating equipment as was enjoined by the United States District Court in the suit brought against The R. M. Hollingshead Company, as shown by the exhibits submitted with the affidavit of Elwood Hansmann, which I have read.

Subsequent information received by me confirms Mr. Bagley's statement that The R. M. Hollingshead Company owns and controls The Frank Miller Co., and that four of the five directors of The R. M. Hollingshead Company, viz., R. M. Hollingshead, R. M. Bagley, C. W. Tomlinson and R. M. Hollingshead, Jr., comprise four of the six directors of The Frank Miller Co.

A financial report just received by me from a commercial agency states that "The company is controlled by The R. M. Hollingshead Company and it occupies a portion of the building of The R. M. Hollingshead Company." The report also states that "It is reported the company has done a good trade, has a warehouse in San Francisco which is also occupied by The R. M. Hollingshead Company, who is said to take the output of the company," and also that F. J. Semple, president of The Frank Miller Co. was formerly vice president of The R. M. Hollingshead Company.

The attorneys for The Bassick Manufacturing Company have taken steps to procure certified copies of the articles of incorporation of The R. M. Hollingshead Company and The Frank Miller Co. and copies of the annual reports of these concerns showing these facts, and these certified copies will be submitted with this affidavit or filed in court when received from the Secretary of State of New Jersey.

J. E. Otis., Jr.

Subscribed and sworn to before me this 22nd day of February, 1928. Szada Goldberg, Notary Public. (Seal.)

[fol. 304] [Endorsed on back:] No. Equity 2759. In the District Court of the United States for the District of New Jersey. The Bassick Manufacturing Company, Plaintiff, vs. The Frank Miller Co. Affidavit of J. E. Otis, Jr. Williams, Bradbury, McCaleb & Hinkle, 1315 Monadnock Block, Chicago.

Frank Miller Co.

Certificate of Incorporation

We, the undersigned, in order to form a corporation for the purposes hereinafter stated, under and pursuant to the provisions of an Act of the Legislature of the State of New Jersey, entitled "An Act Concerning Corporations (Revision of 1896)," and the acts amendatory thereof and supplemental thereto, do hereby certify as follows:

Name.—I. The corporate name is Frank Miller Co.

Registered Office.—II. The registered office of the corporation is 304-306 Market Street, Camden, New Jersey, and the New Jersey Corporation Guarantee & Trust Company is designated as the statutory agent therein, in charge thereof, and upon whom process against the corporation may be served.

Principal Objects.—III. The objects for which the corporation is established are primarily:

To manufacture, buy, sell, import and export, and deal in all or any kinds of leather dressings, oils, soaps, blackings, polishes and other specialties, including automobile, mill, laundry, toilet and family soaps.

To manufacture, buy, sell, deal in and use alkalies and chemicals of all kinds and all articles and things used in the manufacture, maintenance and working thereof, and also all apparatus and implements and things for use either alone or in connection with products of which they are ingredients or in the manufacture of which they are a factor.

[fol. 305] Subsidiary Purposes and Powers.—As subsidiary to and in connection with the foregoing from time to time the corporation may:

Manufacture, purchase or otherwise acquire goods, wares, merchandise and personal property of every class and description, and hold, own, mortgage, sell or otherwise dispose of, trade, deal in and deal with the same.

Acquire and undertake the good-will, property, rights, franchises, contracts and assets of every manner and kind

and the liabilities of any person, firm, association or corporation, either wholly or in part, and pay for the same in cash, stock or bonds of the corporation, or otherwise.

Enter into, make, perform and carry out contracts of every kind and for any lawful purpose with any person, firm, association or corporation.

Issue bonds, debentures or obligations of the corporation, and at the option of the corporation to secure the same by mortgage, pledge, deed of trust or otherwise.

Acquire, hold, use, sell, assign, lease, grant licenses in respect of, mortgage, or otherwise dispose of letters patent of the United States or any foreign country, patents, patent rights, licenses and privileges, inventions, improvements and processes, trade-marks and trade names, relating to or useful in connection with any business of the corporation.

Hold, purchase or otherwise acquire, sell, assign, transfer, mortgage, pledge or otherwise dispose of shares of the capital stock and bonds, debentures or other evidences of indebtedness created by other corporation or corporations, and, while the holder thereof, exercise all the rights and privileges of ownership, including the right to vote thereon.

Purchase, hold and re-issue the shares of its capital stock, its bonds or other securities.

Remunerate any person or corporation for services rendered, or to be rendered, in placing or assisting to place or guaranteeing the placing or underwriting of any of the shares of stock of the corporation, or any debentures, bonds or other securities of the corporation, or in or about the formation or promotion of the corporation, or in the conduct of its business.

With a view to the working and development of the properties of the corporation, and to effectuate, directly or indirectly, its objects and purposes, or any of them, the corporation may, in the discretion of the directors, from time to time carry on any other lawful business, manu- [fol. 306] facturing or otherwise, to any extent and in any manner not unlawful.

The corporation may conduct business in the State of New Jersey, and elsewhere, including any of the states, territories, colonies or dependencies of the United States, the District of Columbia, and any and all foreign coun-

tries, have one or more offices therein, and therein to hold, purchase, mortgage, lease, let and convey real and personal property, except as and when forbidden by local laws.

The foregoing clauses shall be construed both as objects and powers, but no recitation, expression or declaration of specific or special powers or purposes herein enumerated shall be deemed to be exclusive; but it is hereby expressly declared that all other lawful powers not inconsistent therewith are hereby included.

Capital Authorized.—IV. The corporation is authorized to issue capital stock to the extent of Twenty-eight thousand (28,000) shares without nominal or par value.

Of said stock Two thousand (2,000) shares shall be known and designated as Preferred Stock; Twenty-five thousand (25,000) shares shall be known and designated as Class A Common Stock and One thousand (1,000) shares shall be known and designated as Class B Common Stock.

Said Preferred Stock may be issued as and when the board of directors shall determine and shall entitle the holder thereof to receive out of the net earnings, and the corporation shall be bound to pay, a fixed cumulative dividend in the amount of Seven Dollars ($7.) per annum, payable semi-annually on the fifteenth days of January and July in each year before any dividend shall be set apart or paid on Class A or Class B stocks.

Said Class A Stock may be issued as and when the board of directors shall determine and shall entitle the holder thereof to receive out of the net earnings, and the corporation shall be bound to pay, after a semi-annual dividend of Three dollars and fifty cents ($3.50), per share, together with all accumulated dividends have been set apart or paid to the holders of the Preferred Stock, a fixed cumulative dividend in the amount of Two Dollars ($2.00) per share, per annum, payable semi-annually on the fifteenth days of January and July in each year, before any dividends shall be set apart or paid on the Class B Stock.

Said Class B Stock may be issued as and when the board of directors shall determine and shall entitle the holder [fol. 307] thereof to receive out of the net earnings, and the corporation shall be bound to pay, after a semi-annual dividend of Three Dollars and fifty cents ($3.50) per share, together with all accumulated dividends have been set apart or paid to the holders of the Preferred Stock and after a

semi-annual dividend of One Dollar ($1.00) per share, together with all accumulated dividends have been set apart or paid to the holders of Class A Stock, a fixed cumulative dividend in an amount equal in dollars to all of the dividends set apart or paid to the holders of the Class A stock.

After a dividend or dividends have been set apart or paid to the holders of the Preferred Stock in the amount of Seven Dollars ($7.00) per share, together with accumulated dividends, for any one year, and after dividends have been set apart or paid to the holders of the Class A Stock in the amount of Two Dollars ($2.00) per share, together with accumulated dividends during said year, and after dividends have been set apart or paid to the holders of the Class B Stock in an amount equal in dollars to all the dividends of any kind set apart or paid to the holders of Class A Stock during said year, then one-half of the remaining earnings to be distributed during said year as dividends shall be declared and paid to the holders of Class A Stock in amounts equal share per share and the balance of one-half of said earnings declared as dividends during said year shall be declared and payable pro rata to the holders of Class B Stock.

Such Preferred Stock, at the discretion of the Company, shall be subject to redemption at One Hundred Dollars ($100.) per share, together with a sum equivilent to all unpaid accrued dividends thereon, on July 15th, 1928, or any dividend day thereafter, and any such redemption of Preferred Stock shall be made on not less than thirty days' notice, given in such manner as shall be provided in the By-Laws of the corporation and as shall be determined by resolution of the Board of Directors.

The holders of Preferred Stock shall, in case of liquidation or dissolution of the corporation, before any amount shall be paid to the holders of the Common Stocks, be entitled to be paid One Hundred Dollars ($100.) per share, together with a sum equivilent to all unpaid accrued dividends thereon after the payment of said sums as aforesaid, the holders of the Preferred Stock shall not be entitled to any other share or part of the assets of the corporation: [fol. 308] the remaining assets of the corporation shall be distributed to the holder of the Common Stocks, according to their respective rights.

The Preferred Stock shall have no voting power.

Such Class A Stock, at the discretion of the Company, shall be subject to redemption at five per cent (5%) more than the highest price for which any issue of the Class A Stock has been sold by the Company, on July 15th, 1928, or on any dividend day thereafter, and any such redemption of Class A Stock shall be made on not less than sixty days' notice given in such manner as shall be provided in the By-Laws of the corporation and as shall be determined by resolution of the Board of Directors.

In case the dissolution, voluntary or involuntary, after the Preferred Stock has received One hundred dollars ($100.) per share, plus accumulated dividends, Class A Stock shall receive an amount equal to the book value of Class A Stock at the time of incorporation, plus the amount received from the sale of Class A Stock up to the date of dissolution, plus any accumulated earnings due the Class A Stock, the total of these amounts to be divided by the number of Class A shares outstanding, which will constitute the amount that each share of Class A Stock shall receive out of the assets before any division be paid to Class B Stock. If there be any surplus or assets remaining after taking care of the Preferred Stock and Class A Stock, as hereinbefore stated, same shall be paid to Class B Stock up to an amount equal to the total amount paid to the Class A Stockholders. If there should then be any remaining surplus, same shall be divided one-half, share and share alike to Class A Stockholders and one-half, share and share alike, to Class B Stockholders.

Class A Stock shall have no voting power, the sole voting power shall be vested in Class B Stock.

The holders of any class of stock shall have no right as such to subscribe for any future issue of capital stock of the Corporation, and the Board of Directors shall, in their absolute discretion, be authorized to sell or issue future issues of capital stock to such person or persons, corporation or corporations, as they may determine.

V. The capital stock with which the corporation will commence business is subscribed by the incorporators as follows:

[fol. 309] Name	No of shares	No. Par.
F. R. Hansell	1	"
I. C. Clow	1	"
John A. MacPeak	18	"

The post-office address of each of the incorporators is Camden, N. J.

VI. The corporation shall keep at its registered office in this State the transfer books, in which the transfers of stock shall be registered, and the stock books, which shall contain the names and addresses of the stockholders and the number of shares held by them respectively, which shall at all times during the usual hours of business be open to the inspection of a stockholder in person with respect to his interest as such stockholder, or for a purpose germane to his status as such, upon application in writing to the registered agent of the corporation in charge of such office and having the custody of said books; but the registered agent may refuse permission to any stockholder to examine the same (except as to the entries affecting the shares owned by such stockholder), unless and until satisfied that such examination and the information to be acquired thereby are for a legitimate purpose and not for a purpose hostile to the interest of the corporation or its individual stockholder, and the determination of the registered agent shall be final, conclusive and binding upon all stockholders and all persons claiming under such stockholders.

VII. In furtherance and not in limitation of the powers conferred by statute, the Board of Directors are expressly authorized:

To hold their meetings, to have one or more offices, and to keep the books of the corporation within or, except as otherwise provided by statute, without the State of New Jersey, at such places as may from time to time be designated by them.

To determine from time to time whether, and, if allowed, under what conditions and regulations the accounts and books of the corporation shall be open to the inspection of the stockholders, and the stockholders' rights in this respect are and shall be restricted or limited accordingly, and no stockholder shall have any right to inspect any account or book or document of the corporation, except as conferred by statute or authorized by the Board of Directors or by resolution of the stockholders.

To make, alter, amend and rescind the By-Laws of the [fol. 310] corporation, to fix, determine from time to time and vary the amount to be reserved as working capital, to

determine the time for the declaration and payment and the amount of each dividend on the stock, to determine and direct the use and disposition of any surplus or net profits, and to authorize and cause to be executed mortgages and liens upon the real and personal property of the corporation, provided always that a majority of the whole Board concur therein.

Pursuant to the affirmative vote of the holders of a majority of the stock issued and outstanding, at a stockholders' meeting duly convened, to sell, assign, transfer or otherwise dispose of the property, including the franchises of the corporation as an entirety, provided always that a majority of the whole Board concur therein.

To appoint additional officers of the corporation, including one or more vice-presidents, one or more assistant treasurers, and one or more assistant secretaries; and, to the extent provided in the By-Laws, the persons so appointed shall have and may exercise all the powers of the president, of the treasurer and of the secretary respectively, provided, however, that all vice-presidents shall be chosen from the directors.

By a resolution passed by a majority vote of the whole Board, under suitable provisions of the By-Laws, to designate two or more of their number to constitute an Executive Committee, which committee shall, for the time being, as provided in said resolution, or in the By-Laws, have and exercise any or all the powers of the Board of Directors, which may be lawfully delegated, in the management of the business and affairs of the corporation, and shall have power to authorize the seal of the corporation to be affixed to all papers which may require it.

The Board of Directors and the Executive Committee shall, except as otherwise provided by law, have power to act in the following manner, viz.: a resolution in writing, signed as affirmatively approved by all the members of the Board of Directors or by all the members of the Executive or other Committee, and thereafter with original or with duplicated signatures inserted in the recorded minutes and properly dated, shall be deemed to be action by such Board or such Committee, as the case may be, to the extent therein expressed, with the same force and effect as if the same had

been duly passed by the same vote at a regularly convened meeting.

Subject to the foregoing provisions the By-Laws may [fol. 311] prescribe the number of directors to constitute a quorum at their meetings, and such number may be less than a majority of the whole number.

The corporation reserves the right to amend, alter, change, or repeal any provision contained in this certificate in the manner now or hereafter prescribed by statute for the amendment of the certificate of incorporation.

In witness whereof, we have hereunto set our hands and seals this third day of June, 1925.

F. R. Hansell (L. S.) I. C. Clow (L. S.) John A. MacPeak (L. S.)

Witness to the foregoing signatures: E. T. Vennel.

STATE OF NEW JERSEY,
County of Camden, ss:

Be it remembered that on this third day of June, A. D. one thousand nine hundred and twenty-five, before the undersigned, personally appeared F. R. Hansell, I. C. Clow and John A. MacPeak, who I am satisfied are the persons named in and who executed the foregoing certificate, and I having first made known to them, and each of them, the contents thereof, they did each acknowledge that they signed, sealed and delivered the same as their voluntary act and deed.

E. T. Vennell, Commissioner of Deeds.

Registered in the office of the corporation at Camden, in the County of Camden, this third day of June, 1925.

New Jersey Corporation Guarantee & Trust Company, Registered Agent, by F. R. Hansell, Secretary.

Received in the Camden County, N. J., Clerk's Office and recorded in the Clerk's Record, No. 52, on page 397, &c.

Wm. D. Brown, Clerk.

Endorsed: "Filed and Recorded Jun. 3, 1925. Thomas F. Martin, Secretary of State."

O 2433.

[fol. 312] Certificate of Change of Name of Frank Miller Co.

The location of the principal office in this State is at No. 304-306 Market street, in the City of Camden, County of Camden.

The name of the agent therein and in charge therof, upon whom process against this Corporation may be served is New Jersey Corporation Guarantee & Trust Company.

Resolution of Directors

The Board of Directors of the Frank Miller Co., a corporation of New Jersey, on this twenty-ninth day of January, A. D. 1926, do hereby resolve and declare that it is advisable that the name of this Company be changed from Frank Miller Co. to The Frank Miller Co., and do hereby call a meeting of the stockholders, to be held at the company's office, in the city of Camden, N. J., on the fifth day of February, 192-, at 10 A. M., to take action upon the above resolution.

Certificate of Change

The Frank Miller Co., a corporation of New Jersey, doth hereby certify that it has changed its name from Frank Miller Co. to The Frank Miller Co., said change of name having been declared by resolution of the board of directors (above recited) to be advisable, and having been duly and regularly assented to by the vote of two-thirds in interest of each class of stockholders having voting powers, at a meeting duly called by the board of directors for that purpose; and the written assent of said stockholders is hereto appended.

In witness whereof, said corporation has caused this certificate to be signed by its president and secretary, and its corporate seal to be hereto affixed the fifth day of February, A. D. 1926.

Frank C. Miller, President. W. S. Hollingshead, Secretary. (Corporate Seal.)

[fol. 313] State of New Jersey,
County of Camden, ss:

Be it remembered, that on this fifth day of February A. D. 1926, before me, the subscriber, a Commissioner of Deeds, personally appeared W. S. Hollingshead, Secretary

of the Frank Miller Co. *Company,* the corporation mentioned in and which executed the foregoing certificate, who, being by me duly sworn, on his oath says that he is such secretary, and that the seal affixed to said certificate is the corporate seal of said corporation, the same being well known to him; that Frank C. Miller is president of said corporation, and signed said certificate and affixed said seal thereto, and delivered said certificate by authority of the board of directors and with the assent of at least two-thirds in interest of each class of the stockholders of said corporation having voting powers as and for his voluntary act and deed, and the voluntary act and deed of said corporation, in presence of deponent, who thereupon subscribed his name thereto as witness.

And he further says that the assent hereto appended is signed by at least two-thirds in interest of each class of stockholders of said corporation having voting powers, either in person or by their several duly constituted attorneys in fact, thereunto duly authorized in writing.

John A. MacPeak, Commissioner of Deeds.

Stockholders' Assent to Change

We, the subscribers, being at least two-thirds in interest of each class of the stockholders of the Frank Miller Co. *Company* having voting powers, having, at a meeting regularly called for the purpose, voted in favor of changing the name of the Company from Frank Miller Co. to The Frank Miller Co., do now, pursuant to the statute, hereby give our written assent to said change.

Witness our hands this fifth day of February, A. D. 1926.

Stockholders	No. of shares
Frank C. Miller	1 Share.
R. M. Hollingshead, Jr.	1 Share.
R. M. Hollingshead	1 "
R. M. Bagley	1 "
W. S. Hollingshead	1 "
C. W. Tomlinson	1 "
The R. M. Hollingshead Corporation, by R. M. Hollingshead, Pres.	994 Shares.

[fol. 314] Endorsed: "Filed and Recorded Feb. 6, 1926. Thomas F. Martin, Secretary of State."

O-2433.

The Frank Miller Co.

Annual Report

The corporation above named, organized and registered under the laws of the State of New Jersey, does hereby make the following report in compliance with the provisions of an act of the Legislature of New Jersey, entitled "An Act concerning corporations (Revision of 1896)," and the various acts amendatory thereof and supplemental thereto:

First. The name of the corporation is The Frank Miller Co.

Second. The location of the registered office is Nos. 304-306 Market Street, Camden, New Jersey, and the New Jersey Corporation Guarantee & Trust Company is the agent upon whom process against the corporation may be served.

Third. The character of the business is manufacturing, and as otherwise specified in the certificate of incorporation.

Fourth. The amount of the authorized capital stock is 28,000 Shrs. No par.

The amount actually issued and outstanding is 7,000 Shrs. No par.

Fifth. The names of all the directors and officers and the time when the term of office of each expires are as follows:

Names of directors	Expiration of term
R. M. Hollingshead	3rd Monday January, 1929.
R. M. Bagley	do.
C. W. Tomlinson	do.
F. J. Semple	do.
R. M. Hollingshead, Jr.	do.
W. S. Hollingshead	do.

Officers	Expiration of term
President, F. J. Semple	3d Monday, January, 1929.
Vice-President, None	do.
Treasurer, C. W. Tomlinson	do.
Secretary, A. T. Reed	do.
Asst. Treasurer, N. R. DeLong	do.

[fol. 315] Sixth. The next annual meeting of the stockholders for the election of directors is appointed to be held on 3rd Monday January, 1929.

Seventh. The name of the corporation has been at all times displayed at the entrance of its registered office in this State, and the corporation has kept at its registered office in this State a transfer book, in which the transfers of stock are made, and a stock book, containing the names and addresses of the stockholders and the number of shares held by them respectively, open at all times to the examination of the stockholders as required by law.

The post office address of each of the foregoing directors and officers is Nos. 304-306 Market Street, Camden, New Jersey, which is the post office address of the registered office of the company.

The agent in New Jersey for the transfer of stock is the New Jersey Corporation Guarantee & Trust Company, Camden, N. J.

In witness whereof, this report is signed in behalf of the corporation by two of the directors of the said corporation, this 17th day of January, 1928.

F. J. Semple, C. W. Tomlinson.

Endorsed: "Filed Jan. 19, 1928. Joseph F. S. Fitzpatrick, Secretary of State."

STATE OF NEW JERSEY,
Department of State:

I, Joseph F. S. Fitzpatrick, Secretary of State of the State of New Jersey, do hereby Certify that the foregoing is a true copy of Certificate of Incorporation of the Frank Miller Co., Certificate changing the name of said Company to The Frank Miller Co., and Report of Directors and Officers of said corporation, as the same are taken from and compared with the originals filed June 3, 1925, February 6, 1926, and January 19, 1928, respectively, and now remaining on file and of record in my office.

In testimony whereof, I have hereunto set my hand and affixed my Official Seal at Trenton, this Twenty-first day of February, A. D. 1928.

Joseph F. S. Fitzpatrick, Secretary of State. (Seal.)

[fol. 316] Certificate of Incorporation of the The R. M. Hollingshead Co.

Registered Office with the New Jersey Corporation Guarantee & Trust Company, Camden, New Jersey

This is to certify, that we, the undersigned, do hereby associate ourselves into a Company under and by virtue of

the provisions of the Act of the Legislature of the State of New Jersey, for the purposes hereinafter mentioned, and to that end we do by this our certificate set forth, pursuant to "An Act Concerning Corporations, Revision of 1896":

First. That the name which we have assumed to designate such Company and to be used in its business and dealings is the The R. M. Hollingshead Co.

Second. That the place in this State where the principal office is to be situated is the City of Camden, in the County of Camden, and the business of the Company is to be conducted in said City and in such other Townships and Cities in the State as the nature and progress of the business of the corporation shall from time to time render necessary or desirable.

The Company shall have full power and authority to conduct its business and have one or more offices without the State of New Jersey, in such places in the several States and Territories of the United States and in such Foreign Countries as shall from time to time be found necessary or convenient for the purposes of the Company's business.

Third. That the objects for which this Company is formed are to do any or all of the things herein set forth to the same extent as natural persons might or could do, and in any part of the world, as principals, agents, contractors, trustees or otherwise, and either alone or in company with others, and in furtherance, and not in limitation, of the general powers conferred by the Laws of the State of New Jersey, it is hereby expressly provided that the Company shall have also the following powers:

To manufacture, purchase and deal in Leather Dressings, Oils, Soaps, Blackings and Polishes, and other specialties; also all grades of Soaps including Mill, Laundry, Toilet and Family Soaps, including the acquisition by purchase, manufacture or otherwise of all materials, supplies, ma- [fol. 317] chinery and other articles necessary or convenient for use in connection with and in carrying on the business herein mentioned, or any part thereof.

(a) To manufacture, purchase or otherwise acquire, hold, own, mortgage, pledge, sell, assign and transfer, invest, trade, deal in and deal with goods, wares and merchandise and property of every class and description.

(b) To acquire the good will, rights and property of any kind, and to undertake the whole or any part of the assets and liabilities of any person, firm, association or corporation, and to pay for the same in cash, stock of this company, bonds or otherwise.

(c) To apply for, obtain, register, purchase, lease or otherwise acquire, and to hold, own, use, operate, introduce and to sell, assign or to otherwise dispose of, to grant licenses in respect of or otherwise turn to account any and all trade marks, trade names and distinctive marks, and all inventions, improvements and processes used in connection with, or secured under Letters Patent of the United States or elsewhere, or otherwise, and with a view to the working and development of the same to carry on any business whether manufacturing or otherwise which the Company may think calculated directly or indirectly to effectuate these objects.

(d) To purchase or otherwise acquire, to hold, sell, assign, transfer, mortgage, pledge exchange or otherwise dispose of bonds, mortgages, debentures, obligations, or shares of the capital stock of any corporation, and the exercise in respect of all such property any and all the rights, powers and privileges of individual owners thereof.

(e) To draw, make, accept, endorse, discount, execute and issue promissory notes, bills of exchange, warrants, bonds, debentures, and other negotiable or transferable instruments.

(f) To procure the Company to be registered or recognized, to have one or more offices to carry on its operations and business, and unlimitedly to hold, purchase, mortgage, and convey real and personal property in any State or Territory of the United States, and in any Foreign Country or place.

To do all and everything necessary, suitable or proper, for the accomplishment of any of the purposes or attainment of any of the objects hereinbefore enumerated, or which shall at any time appear for the benefit of the Company, and in general to engage in any and all lawful business whatever, necessary or convenient, with all the powers which are now or may hereafter be granted to corporations [fol. 318] under the laws of the State of New Jersey.

It is the intention that the objects specified in the Third paragraph shall, except where otherwise expressed, in said paragraph, be nowise limited or restricted by reference to or inference from the terms of any other clause or other paragraph in this charter, but that the objects specified in each of the clauses of this paragraph shall be regarded as independent objects.

Fourth. The total amount of the capital stock of this Company is to be One hundred thousand dollars, ($100,000.00) and the number of shares into which it is to be divided is One thousand, (1000) shares of One hundred dollars ($100) each, of which One Thousand dollars ($1000.) is the amount of capital with which said Company will commence business.

Fifth. The names and residences of the incorporators and the number of shares subscribed for by each, the aggregate of which subscriptions is the said amount with which the Company will begin business, are as follows:

Name	Residence	Number of shares
R. M. Hollingshead	Camden, N. J.	5
C. H. Walton	Trenton, N. J.	4
W. B. Stewart	Merchantville, N. J.	1

Sixth. That the date on which the existence of said Company shall begin is the third day of January, 1898, and it shall continue for the full period now or hereafter allowed by the Laws of the State of New Jersey to corporations.

Seventh. 1. The Board of Directors shall have full and unrestricted power without the assent or vote of the stockholders to make, alter, amend and rescind the by-laws of this Company, to fix the amount to be reserved as working capital, to authorize and cause to be executed mortgages and liens upon the real and personal property of this Company, upon such terms and conditions as shall to the Board seem proper, and upon like terms and conditions, to sell, in the usual course of business, property both real and personal.

With the consent in writing and pursuant to vote of the holders of a majority of the stock issued and outstanding, the stockholders having been formally convened in a meeting, the Directors shall have power and authority to sell,

assign, transfer, mortgage or otherwise dispose of the [fol. 319] whole property of this corporation, or any part or portion thereof, on such terms and conditions as the Directors shall deem fit, right and just.

2. The Company may in its by-laws confer powers additional to the foregoing upon the Directors, and may prescribe the number necessary to constitute a quorum of its Board of Directors, which number may be less than a majority of the whole number.

3. The Board of Directors may, by resolution, passed by a majority of the whole Board, designate two or more of their number to constitute an Executive Committee, which Committee shall for the time being, to the extent provided in said resolution or in the by-laws of said Company, have and exercised all the powers of the Board of Directors in the management of the business and affairs of the Company, and have power to authorize the seal of the Company to be affixed to all papers which may require it.

4. No stockholders holding less than ten per cent. of the total stock issued shall be entitled to an examination of the books of account, or documents, or papers or vouchers of this Company, except by a resolution of the Board of Directors giving such privilege, and an examination shall then be had only at the time and place in the manner, to the extent and by the person named in such resolution of the Board of Directors, excepting from this entire restriction only such corporate records are, by statute, open to the inspection of stockholders.

This restriction shall not be construed to limit the right or power of any Director or Officer of the corporation to examine the books, papers or vouchers of the said corporation.

5. The Directors may hold their meetings, and have an office, and keep the books of the corporation (except the stock and transfer books) outside of this State.

In witness whereof. we have hereunto set our hands and seals, this twenty fourth day of December—1897.

R. M. Hollingshead (L. S.) C. H. Walton (L. S.)
W. B. Stewart (L. S.)

In presence of Saml. W. Bel[redacted].

[fol. 320] STATE OF NEW JERSEY,
County of Camden, ss:

Be it remembered that on this twenty fourth day of December A. D. Eighteen hundred and ninety seven before me a *A* Master in Chancery of said State personally appeared R. M. Hollingshead, C. H. Walton and W. B. Stewart who I am satisfied are the persons named in and who executed the foregoing certificate, and I having first made known to them, and each of them the contents thereof, they did each acknowledge that they signed, sealed and delivered the same as their voluntary act and deed.

Saml. W. Beldon, Master in Chancery of N. J.
(Seal.)

Received in the Camden County, N. J., Clerk's Office, December 29th, A. D. 1897, and recorded in the Clerk's Record No. 10, page 508, &c., of Corporations.

Robt. L. Barber, Clerk.

Endorsed: "Filed Dec. 31, 1897. George Wurts, Secretary of State."

The R. M. Hollingshead Co.

Annual Report

The corporation above named, organized and registered under the laws of the State of New Jersey, does hereby make the following report in compliance with the provisions of an act of the Legislature of New Jersey, entitled "An Act concerning corporations (Revision of 1896)," and the various acts amendatory thereof and supplemental thereto:

First

The name of the corporation is The R. M. Hollingshead Co.

Second

The location of the registered office is No. 840 Cooper Street, Camden, New Jersey, and R. M. Hollingshead is the agent upon whom process against the corporation may be served.

[fol. 321] Third

The character of the business is manufacturing and as otherwise specified in the certificate of incorporation.

Fourth

The amount of the authorized capital stock is ..... 320,000 Shrs. no par
The amount actually issued and outstanding is ..... 313,482 " " "

Fifth

The names of all the directors and officers and the time when the term of office of each expires are as follows:

Names of directors	Expiration of term
R. M. Hollingshead	3rd Monday January, 1929
R. M. Bagley	" " " "
C. W. Tomlinson	" " " "
L. E. Crandall	" " " "
R. M. Hollingshead, Jr.	" " " "

Officers	Expiration of term
President, R. M. Hollingshead	3rd Monday January, 1929
Vice-President, R. M. Bagley	" " " "
Vice-President, L. E. Crandall	" " " "
Treasurer, C. W. Tomlinson	" " " "
Secretary, A. T. Reed	" " " "
Asst. Secretary, T. J. Bagley	" " " "

Sixth

The next annual meeting of the stockholders for the election of directors is appointed to be held on the third Monday in January, 1929.

Seventh

The name of the corporation has been at all times displayed at the entrance of its registered office in this State, and the corporation has kept at its registered office in this State a transfer book, in which the transfers of stock are made, and a stock book containing the names and addresses of the stockholders and the number of shares held by them respectively, open at all times to the examination of the stockholders as required by law.

The post office address of each of the foregoing directors [fol. 322] and officers is No. 840 Cooper Street, Camden, New Jersey, which is the post office address of the registered office of the company.

In witness whereof, this report is signed in behalf of the corporation by two of the directors of the said corporation this 17th day of January, 1928.

C. W. Tomlinson. R. M. Hollingshead.

Endorsed: "Filed Jan. 23, 1928. Joseph F. S. Fitzpatrick, Secretary of State."

State of New Jersey

Department of State

I, Joseph F. S. Fitzpatrick, Secretary of State of the State of New Jersey, do hereby certify that the foregoing is a true copy of Certificate of Incorporation and last Annual Report of Officers, Directors, &c., of The R. M. Hollingshead Co., as the same is taken from and compared with the originals filed December 31, 1897 and January 23, 1928, respectively, and now remaining on file and of record in my office.

In testimony whereof, I have hereunto set my hand and affixed my Official Seal at Trenton, this twenty-first day of February, A. D. 1928.

Joseph F. S. Fitzpatrick, Secretary of State. (Seal.)

Certified Copy

UNITED STATES OF AMERICA,
For the District of New Jersey, ss:

I, George T. Cranmer, Clerk of the United States District Court in and for the District of New Jersey, do hereby certify that the annexed and foregoing is a true and full copy of the original Certificate of Incorporation and Last Annual Report of Officers, Directors, &c., of the R. M. Hollingshead Co. now remaining among the records of the said Court in my office.

In testimony whereof I have hereunto subscribed my name and affixed the seal of the aforesaid Court at Trenton this 13th day of April, A. D. 1928.

George T. Cranmer, Clerk, by Charles S. Chevrier, Deputy Clerk. (Seal.)

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[fol. 323] UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

No. 2759

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER CO., Defendant

ORDER

This cause having come on to be heard before the Court upon plaintiff's motion to dismiss, the same having been argued by counsel, and the Court being fully advised in the premises, it is

Ordered:

That the above entitled cause be dismissed with the taxable costs to the defendant to be taxed by the clerk.

J. L. Bodine, United States District Judge.

Certified Copy

UNITED STATES OF AMERICA,
For the District of New Jersey, ss:

I, George T. Cranmer, Clerk of the United States District Court in and for the District of New Jersey, do hereby certify that the annexed and foregoing is a true and full copy of the original Order now remaining among the records of the said Court in my office.

In testimony whereof, I have hereunto subscribed my name and affixed the seal of the aforesaid Court at Trenton this 13th day of April, A. D. 1928.

George T. Cranmer, Clerk, by Charles S. Chevrier, Deputy Clerk. (Seal.)

[fol. 324] PLAINTIFF'S EXHIBIT 2—Filed Apr. 26, 1928

IN THE UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

Equity. No. 2759

BASSICK MANUFACTURING CO., Plaintiff,

vs.

THE FRANK MILLER CO., Defendant

AFFIDAVIT OF FRANK J. SEMPLE, CONTRA PLAINTIFF'S MOTION TO DISMISS

STATE OF PENNSYLVANIA,
County of Philadelphia, ss:

Frank J. Semple, being duly sworn, deposes and says:

I am a resident of Haverford, Pennsylvania, and I am President and active chief executive officer of The Frank Miller Co., defendant in the above entitled suit.

I am generally familiar with the suit brought against my Company by the Bassick Mfg. Co. of Chicago. I am also aware of the pendency of a suit by the Bassick Mfg. Co. against the R. M. Hollingshead Co., a corporation of New Jersey, in the United States District Court in Memphis, Tenn.

I understand that Mr. Bagley, Vice-President of the R. M. Hollingshead Co. visited Mr. Otis, Vice President of the Bassick Mfg. Co. in Chicago, about a little over two weeks ago, with a view of soliciting the Bassick Co.'s business for certain preparations.

I have read the Bassick Co.'s motion to dismiss the above entitled cause without prejudice, and I have also read the affidavits of J. E. Otis, Jr., and Elwood Hansmann in support of the Bassick Co.'s Motion.

I am making this affidavit in opposition to the plaintiff's Motion to Dismiss without prejudice.

The final hearing in this cause was had on November 29th, 1927. Within a week after the final hearing in this suit involving my Company, we received a letter from the Bassick Mfg. Co. of Chicago, Ill., dated December 5th, [fol. 325] 1927, a copy of which is attached hereto as Ex-

hibit "A", which appeared to be an inquiry of the Bassick Mfg. Co. as to the possibility of my company selling to the Bassick Mfg. Co. some of our products, to be put up, however, under the Bassick Co.'s trademark "Alemite." This letter of the Bassick Mfg. Co. was duly responded to in our letter of December 10th, 1927, a copy of which is also attached hereto as Exhibit "B." After this we had some further correspondence with the Bassick Mfg. Co. relative to their taking on some of our preparations, as will be seen from copies of this correspondence submitted herewith in chronologic order as Exhibits "C," "D," "E," "F" and "G" respectively.

We realized, however, that in view of the fact that most of our products (though not all of our products) are manufactured for us and sold to us by the R. M. Hollingshead Co., we would in all probability not be able to resell these products to the Bassick Mfg. Co. at a profit to us, in competition with the R. M. Hollingshead Co. or any other manufacturer of this class of merchandise.

In view of this, I finally referred this matter to the R. M. Hollingshead Co. so as to give them an opportunity to make a bid for this business of the Bassick Mfg. Co.

Mr. Otis, in his affidavit on page 2, apparently referring to this visit by Mr. Bagley, states:

"Mr. Bagley informed me that The Frank Miller Co. of Camden, N. J. was and is a subsidiary of the R. M. Hollingshead Co."

(meaning the defendant in the Bassick vs. R. M. Hollingshead Co., pending in the District Court of Memphis, Tenn.).

The Frank Miller Co. is not a subsidiary of the R. M. Hollingshead Co., the Memphis defendant, because the R. M. Hollingshead Co. does not own any of the voting stock of The Frank Miller Co.

Mr. Otis, on page 2 in his affidavit, then endeavors to create the impression that The Frank Miller Co. was purchased by the R. M. Hollingshead Co. "a few years ago" for the purpose of selling the jobbing trade under a different brand, the same products which the R. M. Hollingshead Co. sells to the dealers direct. This is likewise not true.

The business of The Frank Miller Co. dates back to 1838, as will be revealed by the affidavits of myself and Mr. Frank C. Miller heretofore filed in this cause, which [fol. 326] affidavits now constitute part of the record in this case upon final hearing.

The business of the founder, the original Frank Miller, was expanded and was reorganized a number of different times throughout its career of ninety years.

The individual business of Frank Miller was first formed into a copartnership of "Frank Miller & Sons", back in about 1878, and in 1892 this same business was reorganized in the form of a corporation of New York.

In 1918 the business was reorganized as a corporation of Delaware, though continuing in its old location in New York.

In 1921, as a result of many adversities, The Frank Miller Co., though having a very large business and an established trade and goodwill in the harness making, carriage and automobile trades, was forced into a receivership and was then taken over and again reorganized with the aid of the private capital of Mr. Richard M. Hollingshead, as a New York corporation; the new corporation retaining its old location, personnel and active executive officer, Mr. Frank C. Miller.

In 1924, the business of The Frank Miller Co. (New York corporation) was moved from New York to its present location in Camden, N. J. where it rents one floor of the new eight story building of the R. M. Hollingshead Co. About this time the Frank Miller Co. was reincorporated as a corporation of New Jersey, the instant defendant.

Mr. Otis, in his affidavit, states that The Frank Miller Co. was bought by the R. M. Hollingshead Co.

"for the purpose of selling the jobbing trade under a different brand the same products which the Hollingshead Co. sells to dealers direct."

The truth of the matter is that The Frank Miller Co. was bought in 1921 by Mr. Richard M. Hollingshead personally, and solely because of its long established business (since 1838) and because of its well established trade and goodwill, and solely with the view of reorganizing this old and well

established business upon a sound financial basis, which since has been done, and the business of The Frank Miller Co. today continues distinct and apart from the business of The R. M. Hollingshead Co., both in its management, finances, trade and its goodwill, as a corporation of New Jersey.

Mr. Otis then goes on to state, on page 2 of his affidavit, that

[fol. 327] "My interview on February 9 with Mr. Bagley was the first intimation that I had received that The R. M. Hollingshead Company owned or controlled The Frank Miller Company, which The Bassick Manufacturing Company had sued for patent infringement in a case involving substantially identically the same lubricating equipment as was enjoined by the United States District Court in the suit brought against The R. M. Hollingshead Company, as shown by the exhibits submitted with the affidavit of Elwood Hansmann, which I have read."

Mr. Otis then goes on to state that this "first intimation" resulting from Mr. Bagley's visit was confirmed by subsequent information

"that the R. M. Hollingshead Co. owns and controls The Frank Miller Co." and that

"A financial report just received by me from a commercial agency states that 'The Company is controlled by the R. M. Hollingshead Co. and it occupies a portion of the building of the R. M. Hollingshead Co.' "

I would first like to correct Mr. Otis' "first intimation" as well as Mr. Otis' "subsequent information," as well as the obviously false impression bound to be created by Mr. Otis' statement that the interview with Mr. Bagley on February 9th last, was in fact his "first intimation" of any connection between The Frank Miller Co. and the R. M. Hollingshead Co.

The real facts of the matter, which are and have been of public knowledge for years, and obviously within the reach of any lawyer or business executive, are very clearly and accurately stated in Moody's Industrial Manual for 1927, as well as in Moody's Industrial Manual for the preceding years.

A photostatic copy of pages 2435 to 2437 inclusive of the 1927 edition of Moody's Industrial Manual is submitted herewith as Exhibit "H", while a photostatic copy of pages 2100 to 2102 inclusive of Moody's 1926 edition is submitted herewith as Exhibit "I".

It is obvious that the true facts relative to the Memphis defendant, R. M. Hollingshead Co., and the instant defendant, The Frank Miller Co., were at all times available and well within the reach of Mr. Otis much prior to the filing of this suit against The Frank Miller Co.

As a matter of fact, Mr. Otis' first letter to my Com-
[fol. 328] pany (submitted herewith as Exhibit "A") discredits the impression which Mr. Otis seeks to create, that the status of The Frank Miller Co. *only recently came to his knowledge.*

Page 2 of Mr. Otis' affidavit refers to the commercial agency's report "just received" relative to The Frank Miller Co., informing Mr. Otis that The Frank Miller Co. "occupies a portion of the building of the R. M. Hollingshead Co." This information "just received" by Mr. Otis (to wit: since February 9th, 1928) was apparently thoroughly embedded in Mr. Otis' mind when he dictated his (decoy) letter of inquiry of December 5th, 1927, addressed to The Frank Miller Co. (Exhibit "A" herewith) because he addressed his letter to The Frank Miller Co., Hollingshead Bldg., Camden, N. J., whereas the telephone directory and other local directories merely list The Frank Miller Co.'s address as 9th & Cooper Sts., Camden, N. J., and not as the "Hollingshead Bldg."

I observe that Mr. Otis does not submit for the Court's inspection the source of his "subsequent" information (line 21, page 2, Otis affidavit), nor does he submit the financial report "just received" from a commercial agency, (line 26, page 2, Otis affidavit).

Mr. Otis, on the bottom of page 2, then goes on to say that this financial report "just received" from a commercial agency also states that I "was formerly Vice-President of the R. M. Hollingshead Co."

I was *not* formerly the Vice-President of the R. M. Hollingshead Co., nor was I in any way ever connected with the R. M. Hollingshead Co. in any capacity whatsoever, nor was I ever employed by the R. M. Hollingshead Co.

I was elevated to my present position from that of Vice-President of The Frank Miller Co., succeeding Mr. Frank C. Miller upon his recent retirement June 1st, 1927.

It is now obvious to me that The Bassick Co.'s first letter to my Company, directly following the final hearing in this cause, was nothing more than a decoy to inveigle me or some other officer of my Company into some communication with Mr. Otis so as to enable Mr. Otis to make "recent" discovery of some story to form the basis or an excuse for moving to dismiss this suit without prejudice, after the fil-
[fol. 329] ing of proofs and final hearing in this cause.

It is obvious that Mr. Otis was well aware of the facts in the premises well before February 9th, 1928, when in conversation with Mr. Bagley, he got his "first intimation" of things which were of public knowledge for years, and the knowledge of which he inadvertently displayed in his original letter of December 5th, 1927 (Exhibit "A").

The facts in the matter were obviously within easy reach of the Bassick Co. before and ever since the bringing of the instant suit, and certainly before my Company prepared and presented its comprehensive defense record at great expense, by merely looking up these facts in Moody's Industrial Manual, which is as well known to any business executive or lawyer as a telephone directory is to the layman and which is referred to by a layman either to obtain the telephone number or the address of any person or business.

It is obvious to me also that this most recent of the series of dilatory and evasive steps taken by the plaintiff ever since the filing and presentation of defendant's comprehensive record, is nothing more than a last attempt of the plaintiff to avoid an adjudication of this patent monopoly upon a full and adequate defense record set up by a legitimate and dignified business organization and instead, to obtain a decree in some other jurisdiction, under more favorable circumstances and without the handicap of a defense record such as has been filed in the instant case, which, I am advised, the plaintiff has so far been unable successfully or reasonably to rebut in any vital respect.

While I am not versed in the law, yet it seems to me that it would certainly be a perversion of justice to permit a defendant to be put to the enormous expense that my Com-

pany has been put in preparing, submitting and arguing a complete and adequate defense, and then to permit the plaintiff to withdraw its suit without prejudice only to have the same questions determined and adjudicated in some other jurisdiction thousands of miles away, under circumstances more favorable to plaintiff.

The business of my Company is separate and distinct from the business of the R. M. Hollingshead Co., the Memphis defendant, and Mr. Norman R. DeLong and myself have full, complete and active charge of all the affairs of The Frank Miller Co. Mr. DeLong and myself determine the sales policies of the Company, that is, determine The [fol. 330] Frank Miller line. I have charge of our sales organization and keep in constant touch with our trade, and it is I, with the assistance of Mr. DeLong, who determines upon each and every product sold or to be sold by The Frank Miller Co.

The business of my Company is not only separate and distinct from the business of the R. M. Hollingshead Co. insofar as its control, management, direction or insofar as its personnel, sales force and offices are concerned, but my Company also possesses a goodwill in the trade, based upon ninety years of continuous and unbroken business in serving the laundry, harness, carriage and (since about 1905) the automobile trade, with a number *number* of high grade preparations and specialties.

In view of the many conflicting opinions and general confusion as to the real scope and extent of the Bassick Co.'s adjudicated patent monopoly under the patents in suit, my Company discontinued the sale of all lubricating equipment many months prior to the starting of this suit, as it was my Company's intention to await the decision in some of the cases against manufacturers, then pending, particularly in New York and Delaware.

My Company's temporary discontinuance of all lubricating equipment and apparatus during this period of confusion was effected at a great sacrifice and loss of business and goodwill in the trade. Since the Bassick Co. some months subsequent thereto instituted this suit and filed its proofs, my Company has expended approximately $11,000.00 in the preparation and presentation of a complete and adequate defense, including a comprehensive search of

the prior art of pressure lubrication and bayonet coupling, as well as the preparation of exhibit models exemplifying each of the main prior art devices.

It would seem to me that while an inventor is entitled to all the protection the court can give him in his monopoly, yet that monopoly must be based upon something which the inventor contributed to the then known prior art, and I believe that my Company after having gone to the great expense of apprising the Court of all the facts should be likewise protected against the unwarranted encroachment upon public rights, under the guise of a patent, by the Bassick Mfg. Co., who I believe is endeavoring to expand its monopoly to mechanical devices and expedients which have long been in the public domain.

I am familiar with the lubricating equipment which was sold by my Company.

[fol. 331] I have examined the drawing accompanying Mr. Hansmann's affidavit filed in support of the Motion to Dismiss, and this examination is the first instance that I have ever learned of a "coupler" construction such as portrayed in Mr. Hansmann's drawing.

To the best of my knowledge and belief, none of the "couplers" forming part of the "Frank Miller Lubricator" or lubricating equipment, possessed an internal construction such as portrayed by Mr. Hansmann's drawing. The Frank Miller "coupler" is aptly portrayed by the drawing of Defendant's Exhibit No. 5 heretofore filed in this suit.

And further deponent sayeth not.

Frank J. Semple.

Sworn and subscribed to before me this 27th day of February, 1928.

Nettie Bussinger, Notary Public.

IN THE UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

No. 2759

BASSICK MFG. CO., Plaintiff,

vs.

THE FRANK MILLER CO., Defendant

AFFIDAVIT OF NORMAN R. DELONG, CONTRA PLAINTIFF'S MOTION TO DISMISS

STATE OF PENNSYLVANIA,
County of Philadelphia, ss:

Norman R. DeLong, being duly sworn, deposes and says:

I am of lawful age, reside in Haddonfield, New Jersey, and I am assistant Treasurer of The Frank Miller Co., the defendant in the above entitled suit.

I have full charge of the offices of The Frank Miller Co., and I am an active executive officer of The Frank Miller [fol. 332] Co., second in charge, and I am thoroughly familiar with all the products of The Frank Miller Co.

I am also generally familiar with the litigation in which my Company is involved with the Bassick Mfg. Co., relative to our right to sell pressure lubricating equipment.

I have read the Motion of the Bassick Co. to dismiss their suit against us without prejudice, and have also read the affidavit of Mr. J. E. Otis and Mr. Elwood Hansmann in support of the Bassick Co.'s notice to dismiss.

I am making this affidavit in opposition to the Bassick Company's Motion to dismiss without prejudice, because I believe that such dismissal at this stage of the suit, particularly in view of the flimsy and obviously unfounded cause given by Mr. Otis, would in effect be a great injustice to my Company, which has been put to very great expense of approximately $11,000.00 in the preparation and presentation of a defense to the Bassick Co.'s suit.

I have also read a telegram dated February 22nd, 1928, addressed to our attorneys, Messrs, Wiedersheim & Fair-

banks by Mr. Lynn A. Williams, the Bassick Co.'s Chicago counsel, which telegram reads as follows:

"Confirming my telephone conversation today with Mr. Kalish and in view of recent exchange of telegrams providing for the filing of briefs on March fifth in Bassick versus Frank Miller please be advised that we have just learned of the connection between the Hollingshead Company and the Frank Miller Company, as a result of which we are moving as quickly as possible to dismiss the suit against the Frank Miller Company."

What the Bassick Co. is apparently endeavoring to do at this stage of the proceedings is to set up some reasonable excuse for dismissing their suit without prejudice and this excuse as it appears from Mr. Otis' affidavit page 2, and from the telegram of Mr. Williams, is apparently that pretended facts relative to The Frank Miller Co. and the R. M. Hollingshead Co., another New Jersey corporation and the defendant in a suit in Memphis, (Bassick vs. R. M. Hollingshead Co.) have been "just learned" by the Bassick Co. as a result of an interview which Mr. Otis had with Mr. Bagley on February 9th, which interview Mr. Otis states, was his "first intimation" in the premises.

[fol. 333] Without first going into detail to discredit each and every one of the many misstatements in Mr. Otis' affidavit, I merely want to state, that in spite of the highly ingenious and cunning steps taken by Mr. Otis to "just learn" or to get his "first intimation" so recently and at this late stage in the suit, of matters which have been of public knowledge for many years past, Mr. Otis apparently still did not arrive at the true facts.

The true facts in the matter are aptly set forth in Moody's Industrial Manual for the last few years, as will be evidenced by the photostatic reproductions of the appropriate pages of the last two annual issues of Moody's Industrial Manual, to wit: that of 1927 and that of 1926 (Exhibits "H" and "I" of Mr. Semple's affidavit).

I also submit herewith as Exhibit "J" a photostatic copy of pages 1757 and 1758 of Poor's Industrial Section for 1927, which, like Moody's, made public all facts concerning the instant defendant, long before the plaintiff brought this suit.

While I am but a layman, and do not know whether the true facts relative to The Frank Miller Co. and the R. M. Hollingshead Co. would justify the dismissal of the suit at this late stage, without prejudice, yet I would like to state that whatever significance the true facts may have, such facts were available to the plaintiff before the institution of this suit, and certainly before the filing of the Frank Miller Co.'s very comprehensive and expensive defense record.

It is apparent to me that Mr. Otis has successfully inveigled Mr. Bagley into having an interview with him, merely to justify the impression which he seeks to create by his affidavit, that he only recently had "just learned" of some facts which form the ground for dismissing the Bassick Co.'s suit at this late stage, without prejudice.

My company conducts a successful and dignified business in preparations and specialties for the harness, carriage and automobile trades (also for household uses) and possesses a well established trade and goodwill of its own, with a background of ninety years of continuous, progressive and honorable business in these fields.

I note Mr. Otis' statement that The Frank Miller Co. is "owned and controlled" by the R. M. Hollingshead Co., New Jersey corporation, defendant in a suit in Memphis. While I do not know the legal significance of the true facts involved, nor of the legal status of my Company in view [fol. 334] of the facts, but from my own intimate knowledge, I would say that my Company is not controlled nor owned by the R. M. Hollingshead Co. (Memphis defendant).

The business of my company is entirely independent from that of any other company; maintains its own offices, its own active executive officers (Mr. Frank J. Semple and myself), and maintains its own force of salesmen and enjoys its own trade, reputation and good will for a period many times greater than the existence of the R. M. Hollingshead Co. which is a comparatively young concern.

The Frank Miller Co., about six years ago, as a result of some financial difficulties was reorganized as a New York corporation, and refinanced on a sound basis by Mr. Richard M. Hollingshead; said New York corporation having since (1924) been succeeded by a New Jersey corporation having the same name. The entire voting stock of the

present Frank Miller Co. (defendant) is now (for the past few years) owned by the R. M. Hollingshead Corp., a corporation of Delaware, (not the Memphis defendant) which also owns some of the stock of the R. M. Hollingshead Co., New Jersey Corporation, defendant in Memphis. The R. M. Hollingshead Corp., a Delaware corporation, also owns stock in several other business enterprises.

I have examined the drawing accompanying Mr. Hansmann's affidavit in support of the Bassick Co.'s Motion to Dismiss.

I have, on numerous occasions, examined the internal construction of the "coupler" elements of The Frank Miller Co.'s lubricant dispensing equipment and I am thoroughly familiar with the "coupler" construction of The Frank Miller Co.'s lubricant dispensing equipment.

The coupler portrayed in the drawing accompanying Mr. Hansmann's affidavit is not a coupler such as The Frank Miller Co. has sold and it is some spurious construction attached to the Frank Miller grease dispensing unit of plaintiff's Exhibit "M" of the affidavit of J. E. Otis, Jr., dated July 29th, 1927, filed herein.

The "couplers" employed by The Frank Miller Co. on its grease dispensing units are of the construction portrayed in the drawing of defendant's Exhibit No. 5 accompanying the affidavit of Mr. Schwaiger, filed on behalf of The Frank Miller Co. in this suit. For the purposes of comparison I submit herewith as my Exhibit "K", a photostatic reproduction, side by side, of The Frank Miller Co.'s bayonet type of "coupler" and the spurious coupler which [fol. 335] the plaintiff submits in connection with the defendant's grease dispensing equipment.

And further deponent sayeth not.

Norman DeLong.

Subscribed and sworn to before me this 27th day of February, 1928.

Nettie Bussinger, Notary Public.

IN THE UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

In Equity

No. 2759

BASSICK MANUFACTURING CO., Plaintiff,

vs.

THE FRANK MILLER CO., Defendant

AFFIDAVIT OF ROBERT M. BAGLEY CONTRA PLAINTIFF'S MOTION TO DISMISS

STATE OF PENNSYLVANIA,
County of Philadelphia, ss:

Robert M. Bagley, being duly sworn, deposes and says:

I am of lawful age, reside in Haddonfield, New Jersey, and I am Vice-President of the R. M. Hollingshead Co., a corporation of New Jersey, having its principal place of business in Camden, N. J., and having regular and established places of business or branches in more than twenty cities in the United States.

My company is engaged in litigation with the Bassick Mfg. Co., in the United States District Court in Memphis, Tenn., where we have one of our branch offices, in which litigation our right to sell a grease dispensing pump is involved.

On Thursday, February 9th, last, I called at the Chicago offices of the Bassick Mfg. Co. and sent in my card. I was directed to the office of Mr. Otis. I explained to Mr. Otis [fol. 336] that The Frank Miller Co. had turned over to my company some correspondence which had passed between himself and The Miller Co., with reference to their furnishing the Bassick Co. a line of automobile products under their trade-mark "Alemite."

I explained that the R. M. Hollingshead Co. manufactured almost all of the products for The Frank Miller Co. and since The Frank Miller Co. did not manufacture their merchandise, they decided to let my company make a bid directly to the Bassick Co.

Mr. Otis then asked me in what way my Company and The Frank Miller Co. were connected. I repliel that the R. M. Hollingshead Co. made the most of the Frank Miller products, and that the R. M. Hollingshead Co. owned some of the stock of The Frank Miller Co. Mr. Otis replied that he thought there was some connection between the two companies, as he had noted the addresses were the same.

I also told Mr. Otis that The Frank Miller Co. sold their products to jobbers while "Whiz" products were sold direct to dealers. I also told Mr. Otis that The Frank Miller Co. had been in business many years, selling to jobbers, and that The Frank Miller Co. was acquired at a receiver's sale six or seven years ago.

After an intermission of about two hours, we renewed our negotiations along the same lines and I explained to Mr. Otis that we had ample facilities for producing a line of automobile products under their brand, and that I felt we could no doubt furnish their products at a saving over the cost at which they could make them themselves, as we would of course manufacture in larger quantities than they would when they started. Mr. Otis stated that while they had discussed the advisability of marketing a more complete line of automobile products, that they had not definitely decided to do so.

Mr. Otis then had their sales manager, Mr. Hiter, come in, to whom I was introduced. After some preliminary conversation, Mr. Hiter or Mr. Otis stated that they felt that inasmuch as their salesmen were calling regularly on the class of trade who sold these products, that they could probably sell the line without very greatly increasing their selling expenses but they had not definitely decided as to whether they would sell the line. About this time, I asked Mr. Otis if we could not figure with him on furnishing their greases, as we were also in an excellent position to manufacture this product and that we might be able to effect a considerable saving over what they were then paying for [fol. 337] grease. Mr. Otis made some comments as to the accessibility to water transportation and was told that it would cost no more to deliver merchandise by water from our plant that it would from New York.

During the conversation, Mr. Otis mentioned the matter of the litigation between his company and my company and

intimated that he did not believe it was practicable for us to do business together if the litigation was going to continue. I told him that the litigation was instigated by his company, and that we were pretty good scrappers (or something to that effect), and did not feel that we would allow any interference with what we considered our rights. Mr. Otis then stated that he felt that we were somewhat out of our line when we began selling mechanical equipment (grease dispensing pumps) and that he felt that our business was more in chemical products and that their business was in mechanical appliances and that each of us might be better off if we stayed out of the other's field.

I then told Mr. Otis that we in turn felt that his Company invaded our field somewhat when they began selling greases, and that the addition of greasing equipment to our line, was on account of the fact that they had added greases to their line and were using their patented greasing equipment as a leverage to sell greases. Mr. Otis then explained that this was not the case; that they did not intend to force the trade to use their greases on account of their being the manufacturers of greasing equipment. I told Mr. Otis that while it might be true this was not their policy, it seemed to be the concensus of opinion of those with whom we had come in contact, that the trade felt that they were being forced to use "Alemite" greases.

Mr. Otis also explained that they disliked very much our attitude in the litigation, particularly the publishing of a booklet entitled "Memorandum on the Bassick-Alemite Situation in its Relation to Lubricants" and also inquired as to how long we proposed to keep up the litigation with them, and again stated that it would be out of the question for them to do business with us so long as the litigation continued.

Mr. Otis then expressed himself to the effect that his company has been successful in eliminating from the field most of their competitors in grease pumps, and that he considered my company their main menace in their grease pump situation. Mr. Otis also suggested that we would not gain much by winning the suit, because by doing so we would only open up the market for everybody to make [fol. 338] grease pumps. I explained to Mr. Otis that our main interest was the free and unmolested sale of grease and that so long as the trade was dependent entirely upon

the Bassick Mfg. Co. for every conceivable lubricating equipment or pumps with which to dispense grease, we were at a very great disadvantage in competing with the Bassick Co. in the grease line and we see no harm in anybody and everybody making a grease dispensing pump which we think the public have a right to make for the purpose of putting grease into whatever grease cups may be put on the market on automobile and other machinery, including their patented Gullborg grease cups, provided the grease dispensing pumps do not infringe any of the patents of the Bassick Co.

Mr. Otis or Mr. Hiter then inquired why we did not buy our lubricating equipment from them, as they manufactured a large line and could probably furnish us as cheaply as anyone else. I then asked Mr. Otis if he sold a "gun" or "booster" which could be satisfactorily attached to the hose leading from the grease tank of the equipment we had previously sold. He replied that he did not believe they had such an equipment but could make something which would be suitable. He showed me several samples of "guns" which he offered to sell me, which, however, were not adaptable to our use.

I then told Mr. Otis that I could furnish him a sample of our "booster" (a lever-operated pump), as I would like to have him make for us and it was agreed that I do so. I asked Mr. Otis if he was familiar with the "booster" we had used on the equipment we had previously sold and explained roughly what it was like. He said he knew about what it was like and that they would have no difficulty in furnishing this equipment. I then asked him to quote me a price as soon as he received our sample, with a hose about two feet long with an "Alemite" coupler on the end of the hose. I told him that I would have this "booster" sent from our Chicago branch the next day, which was done.

I then told Mr. Otis that I would be very glad to figure with them on their requirements of grease for the various grades and sizes of packages and he promised to send us a sample of each grade of grease to Camden, in order that we might quote on the identical grease that they used, rather than have us secure samples from the trade.

During the conversation I asked Mr. Otis why they had licensed some of the manufacturers of grease pumps, and was advised by him that he licensed only three manufacturers and did not intend to license any others. I asked

[fol. 339] him why they licensed the Cincinnati Ball Crank Co. and was informed that he felt that the Bassick Co. could outsell them and that they were receiving ten percent on the net sale of the equipment as royalty which they considered a very good arrangement.

Since my original interview with Mr. Otis, I have also been in touch with him over the 'phone, relative to the various matters, as to which we were endeavoring to enter into some business relations.

I was certainly surprised when I was informed by Mr. E. Hayward Fairbanks that my interview with Mr. Otis had been utilized, and in fact made the sole basis of a certain Motion to Dismiss the suit which the Bassick Co. had brought against The Frank Miller Co., as I had considered my conference with Mr. Otis of a purely business nature, and while we casually and in a general way made some reference to the litigation in which the Bassick Co. and the Hollingshead Co. were engaged in Memphis, I certainly had no idea that Mr. Otis had any other object in view than some possible business relations with my Company.

At the request of Mr. E. Hayward Fairbanks, I have read the affidavit of Mr. J. E. Otis, Jr., and while I cannot see how my personal visit to the offices of the Bassick Co. can be of any significance, yet I want to correct some of the statements made by Mr. Otis in his affidavit.

Mr. Otis, on page 2 of his affidavit, states that I informed him

"that the Frank Miller Co. of Camden, N. J., was and is a subsidiary of the R. M. Hollingshead Co."

According to my best recollection of my extended conversation with Mr. Otis more than two weeks past, I did not inform Mr. Otis of such a condition. Probably what I did tell Mr. Otis was that the R. M. Hollingshead Co. owns some stock in The Frank Miller Co. and what Mr. Otis says about The Frank Miller Co. being a subsidiary of the R. M. Hollingshead Co. is nothing more than Mr. Otis' inference. The fact of the matter is that the R. M. Hollingshead Co. owns some preferred (non-voting) stock, but does not own any of the voting stock of The Frank Miller Co. and hence, judging merely from the commonly accepted significance of such a term, The Frank Miller Co. is not in any sense of the word a subsidiary of the R. M. Hollingshead Co., because the latter owns no voting stock.

Mr. Otis then states that his interview on February [fol. 340] 9th with me was his "first intimation" that he received that the R. M. Hollingshead Co. owned or controlled The Frank Miller Co. Regardless of whether this was Mr. Otis' "first intimation" or not, I do not understand how he could have received that intimation from his conversation with me, because I neither told him nor suggested the existence of such situation;—not because it would make any difference to me, but chiefly because it would not have been in line with the true facts in the matter.

The true facts in the matter can be learned by anyone upon consulting such well-known annual publications as "Moody's Industrial Manual" or "Poor's Industrials," or by obtaining a report from anyone of the several mercantile agencies, each of which steps, in my opinion, are the common and well accepted sources of all such information.

I also want to correct Mr. Otis' statement that Mr. Frank J. Semple was at one time Vice-President of the R. M. Hollingshead Co. That is not the same and I do not see how any report of a commercial agency could possibly have given Mr. Otis such information, as Mr. Semple has never been connected with my company in any manner.

As Vice-President of the R. M. Hollingshead Co., I am its active executive and devote my entire time to its affairs.

While I am a director in The Frank Miller Co., I do not have charge of its management in any sense, nor to any extent whatsoever, as the entire active management of The Frank Miller Co. is in the hands of Mr. Frank J. Semple, its president, and Mr. Norman R. DeLong, its Assistant Treasurer.

I am likewise a director in several other corporations.

And further deponent sayeth not.

Robert M. Bagley.

Subscribed and sworn to before me this 27th day of February, 1928, Nettie Bussinger, Notary Public.

[fol. 341] IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW JERSEY

In Equity

No. 2759

BASSICK MFG. CO., Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

AFFIDAVIT OF E. HAYWARD FAIRBANKS, CONTRA PLAINTIFF'S MOTION TO DISMISS

STATE OF PENNSYLVANIA,
County of Philadelphia, ss:

E. Hayward Fairbanks being duly sworn, deposes and says, I am of lawful age, am a member of the Bar, am of counsel for defendant herein, and am familiar with all the procedings herein.

I am also of counsel for the defendant in the case of Bassick Mfg. Co. v. R. M. Hollingshead Co., pending in the District Court in Memphis, Tennessee, which latter case was argued on or about January 14th, 1927, as a motion for preliminary injunction in said Memphis District.

I am familiar with the papers and proceedings in said Memphis suit, as I argued this case personally in Memphis, in behalf of the defendant there. At the time this Memphis case was submitted, the cases involving this Gullborg patent here in suit were under advisement in the Circuit Court of Appeals for the Sixth Circuit. I think Mr. Otis has fairly stated the present situation in the Memphis district.

The structure of the drawing attached to Mr. Hansmann's affidavit is dissimilar from the defendant's coupling structure involved in the Memphis suit, which Mr. Hansmann refers to as being Exhibit K in Mr. Davis' affidavit there. This Exhibit K or defendant's coupling in the Memphis suit lacked entirely the central ball valve and the central spring pressing upwardly thereon portrayed in the drawing attached to Mr. Hansmann's affidavit.

I would further state that so far as I am aware the coupling Exhibit K in the Memphis suit has never been

[fol. 342] passed upon by any Circuit Court of Appeals. There is therefore an entirely different question of infringement involved in the instant case from that which was involved in the Circuit Courts of Appeal for the Sixth and Seventh Circuits.

As to Plaintiff's Right to Dismiss at This Stage

Directly upon the service of the writ upon defendant here last Summer defendant made a careful validity search, prepared at great expense a number of full sized physical specimens illustrative of the prior art devices many of which so far as I am aware had never been before any Court. Defendant also retained an experienced patent expert and a number of weeks were expended in good faith in the preparation of the defense record in this case. All told a number of thousands of dollars have been spent by this defendant in preparing this case for trial or argument upon motion for preliminary injunction.

During the argument on November 29th, 1927, it was suggested by the Court and agreed to by counsel, that the case be considered as on final hearing, briefs to be filed later. Defendant's counsel have been engaged for a number of weeks past in the preparation of defendant's brief. On February 15th, 1928 a letter was received from your Honor, dated February 14th, inquiring as to the briefs, following which the following correspondence took place between my office and plaintiff's New York counsel:

"February 15th, 1928.

Stephen Philbin, Esq., 5 Nassau Street, New York, N. Y.

Re Bassick vs. Frank Miller

Dear Sir:

Under date of February 14th we received a letter from Judge Bodine, a carbon of which was apparently sent you.

Will you kindly advise us if we can agree on an approximate date, say a couple of weeks or so hence, so that briefs for both sides may be filed and exchanged?

We are inclosing herewith a carbon of our letter to Judge Bodine.

Yours very truly, (Sgd.) E. Hayward Fairbanks.

EHF:AD.
Encl.

[fol. 343] Feb. 16, 1928—P. M. 4 48

CDV351 14Xu—CD New York, N. Y. 16 437P

E. Hayward Fairbanks, DeLong Bldg., Chestnut and 13th Sts. Philadelphia, Penn.:

Suggest exchange and file briefs in Frank Miller Case March fifth stop Please wire.

(Sgd.) Fish, Richardson and Neave.

February 16, 1928.

Fish, Richardson & Neave, Esqs., 5 Nassau Street, New York, N. Y.

Re Bassick vs. Frank Miller

DEAR SIRS:

We have your wire reading:

"Suggest exchange and file briefs in Frank Miller Case March fifth stop Please wire."

In response, would say that if it is your plan to submit your brief merely typewritten, then date of March 5th is agreeable to us. If, however, you propose to submit your brief in printed form we should like to do likewise, and in that event we would require about a week more for printing.

Kindly advise.

Yours very truly, (Sgd.) E. Hayward Fairbanks.

EHF:AD.

New York, February 18, 1928.

E. Hayward Fairbanks, Esq., DeLong Building, Chestnut & 13th Streets, Philadelphia, Pa.

Re Bassick vs. Frank Miller

DEAR MR. FAIRBANKS:

We are very much obliged to you for your letter of February 16th.

We would like to agree to exchange and file typewritten briefs on March 5th. Kindly wire me on Monday confirming this.

Yours very truly, (Sgd.) Harry R. Ashton.

A:K.

[fol. 344] Philadelphia, Feb. 20, 1928.

Henry R. Ashton, 5 Nassau Street, New York, N. Y.:

Suggestion in your letter February eighteenth satisfactory. Writing.

E. Hayward Fairbanks.

February 20, 1928.

Fish, Richardson & Neave, Esqs., 5 Nassau Street, New York, N. Y.

Re Bassick vs. Frank Miller

Att'n Mr. Ashton

In reply to your letter of February 18th, I have wired you as follows:

"Suggestion in your letter February eighteenth satisfactory. Writing."

I think that we will be able to file our typewritten brief by March 5th, on which day we will send you a copy, you to do likewise.

Yours very truly, Wiedersheim & Fairbanks.

EHF:AD.

Copy

February 21, 1928.

Honorable Joseph L. Bodine, Judge, U. S. District Court, Trenton, N. J.

Re Bassick vs. Frank Miller

DEAR JUDGE BODINE:

Immediately upon receipt of your letter I communicated with Mr. Williams' office in Chicago and with Mr. Fairbanks, counsel for the defendant, and we have agreed, subject, of course, to your approval, that typewritten briefs be submitted on March 5th.

Mr. Williams has asked me to say, with respect to his delay in submitting his brief, that difficulty in procuring copies or access to the defendant's exhibits made it im-

possible for him to complete his brief at the time he had available for the purpose some weeks ago. Since that time a large number of court engagements have made it impossible for him to prepare the brief.

Respectfully, (Sgd.) Henry R. Ashton.

A:K.

[fol. 345] New York, February 21, 1928.

E. Hayward Fairbanks, DeLong Building, Chestnut & 13th Sts., Philadelphia, Pa.

Re Bassick v. Frank Miller

DEAR MR. FAIRBANKS:

I wish to thank you for your telegram and letter of February 20th, stating that it is agreeable to you to file typewritten briefs on March 5th and send us a copy on that day.

We will mail copies of our brief to you on March 5th, and to Judge Bodine on March 3rd.

Yours very truly, (Sgd.) Henry R. Ashton.

A:K.

P. S.—I inclose copy of letter written judge Bodine.

February 24, 1928.

Honorable Joseph L. Bodine, Judge, United States District Court, Trenton, N. J.

Re Bassick vs. Frank Miller Co.

MY DEAR JUDGE BODINE:

I am very much obliged to you for your letter of February 22nd, stating that it is agreeable to you that briefs be filed in this case on March 5th.

Respectfully, (Sgd.) Henry R. Ashton.

A:K.

CC to Mr. Fairbanks.

Copy

United States District Court, District of New Jersey

Chambers of Judge Bodine

Trenton, N. J., February 22, 1928.

My Dear Mr. Ashton:

I have your letter of the 21st instant relative to the briefs in the case of Bassick v. Miller being submitted on March 5th. This date is agreeable to me.

Very truly yours, (Sgd.) Joseph L. Bodine.

[fol. 346] Henry R. Ashton, Esq., 5 Nassau Street, New York City.

New York, February 24, 1928.

E. Hayward Fairbanks, Esq., DeLong Building, Chestnut & 1[illegible], Philadelphia, Pa.

Re Bassick v. Frank Miller

Dear Mr. Fairbanks:

I enclose copy of a letter received from Judge Bodine this morning, dated February 22nd, and copy of my reply.

Yours very truly, (Sgd.) Henry R. Ashton.

Encs.
A:K.

February 25, 1928.

Fish, Richardson & Neave, Esqs., #5 Nassau Street, New York, N. Y.

In re Bassick vs. Frank Miller

Att. Mr. Henry R. Ashton

Dear Mr. Ashton:

I have your letter of February 24th enclosing copies of Judge Bodine's letter of February 22nd and your letter to the Judge of February 24th, for all of which I thank you.

I wrote Judge Bodine on February 21st, as per the enclosed carbon.

Very truly yours, (Sgd.) E. Hayward Fairbanks.

EHF:RH.
Encl.

It will thus be seen from the foregoing that as lately as February 21st, 1928, Mr. Ashton of plaintiff's N. Y. counsel wrote your Honor and also wrote me and that it was agreeable to him and to Mr. Williams, of plaintiff's Chicago counsel, to have typewritten briefs filed on March 5th, which was confirmed by Mr. Ashton's letter of February 24th. On February 24th, plaintiff's motion to dismiss was received at my office in Philadelphia, the same apparently having been prepared in Chicago, two or three [fol. 347] days previously during apparently the very period that Mr. Ashton, Mr. Williams and myself had agreed, subject to your Honor's approval, on the day of March 5th for the filing and exchange of briefs.

I am totally at a loss to understand plaintiff's tactics after putting defendant to an expense of many thousands of dollars in preparing this case for trial, and who several months after the case was argued come in a week or so before the date which has been approved and agreed upon for the filing of briefs, and seek to snatch the case from this Court, and have it dismissed.

Not only are the equities entirely opposed to such an extraordinary procedure, but also the following cases which have been collated infra, not for the purpose of instructing the Court, but that the Court may conveniently look at the same, if it cares to.

Bearing in mind that the defendant has been put to an expense of many thousands of dollars to present and prepare its case for hearing, and that proofs on both sides have been closed and filed, and the case argued three months back, and that plaintiff has within the past week agreed to file briefs before your Honor, on or before March 5th, 1928, it is impossible to find any theory or any case which supports plaintiff's making this extraordinary motion at this stage. The Chief Justice has applied the rule in the following language:

"The usual ground for denying a complainant in equity the right to dismiss his bill without prejudice, at his own costs, is that the cause has proceeded so far that the defendant is in a position to demand on the pleadings an opportunity to seek affirmative relief, and he would be prejudiced by being remitted to a separate action. Having been put to the trouble of getting his counter case properly pleaded and ready, he may insist that the cause

proceed to a decree. Chief Justice Taft, in the matter of Skinner Eddy Corp., 265, U. S. 86, 68 L. Ed. 912, 44 S. Ct. 446."

This rule has been followed uniformly.

D. C. Mass. 1023: Complainant in an infringement suit is not entitled of right to dismiss without prejudice on the ground that the patent is involved in an interference proceeding in the Patent Office where large interests are concerned, where defendant has been put to great expense in the taking of proofs and the case is such that it may be [fol. 348] disposed of on the merits. (Claims 1 and 5 of Patent No. 1,371,413, held void on their face. Hill v. Federal Optical Co., 295 F. 213.)

D. C. Pa. 1912: While it is the general rule in equity, as at law, that plaintiff may withdraw or discontinue his suit on payment of costs, subject only to the qualification that the discontinuance shall not deprive the defendant or others of any right, or have the effect of harassing or inconveniencing them it is a matter of discretion with the chancellor whether defendant has a substantial interest which may be affected. Churchward International Steel Co. v. Carnegie Steel Co., 1286, F. 158. Leave to Discontinue Infringement Suit Without Prejudice Denied, Where Defendant had gone to Great Expense in Preparing Defense.

D. C. Pa. 1912: In suit for infringement of patent, in which defendant set up invalidity for lack of patentable novelty, want of invention by the patentee, and prior use, where defendant afforded complainant every opportunity to examine its engineers, superintendents, and foremen with a view to discovering infringement, and had gone to great trouble and expense to prepare its defense, complainant will not be given leave to withdraw or discontinue the action without prejudice to a new suit at any time when it can obtain more specific and complete information of defendant's methods of Manufacture.

C. C. A. 6th Cir. 1926: Plaintiff held not entitled to dismissal without prejudice as against any party, where one adverse party had sufficient basis for getting affirmative relief. Automotive Products Corporation v. Wolvertine Bumper and Specialty Co., 15 F. (2nd) 745, 747.

Discontinuing Suit—Leave Not Granted

Leave to discontinue for no cause beyond desire to bring a new suit "in view of what has developed subsequent to the closing of the proofs," denied, when defendant had been at large expense beyond taxable costs and disbursements. American Steel & Wire Co. v. Mayer & Englund Co., 121 F. 127 (N. Y.).

Right of Plaintiff to Discontinue Suit as to One Patent

C. C. A. 2nd Cir. 1924: Under District Court Equity Rule 8, authorizing the Court after issue joined to refuse to permit plaintiff to discontinue if defendant is thereby preju-
[fol. 349] diced, even though his only prejudice is the vexation and expense of a possible second suit upon the same cause of action, it was error to permit plaintiff to discontinue suit as to one patent, where such withdrawal was substantially prejudicial to defendant. (Decree 298 F. 33, reversed.) E. Fredericks v. Eugene, 3 (2d) F. 543.

When Bill May be Dismissed on Complainant's Motion

A complainant has the right to move to dismiss the bill, paying the taxable costs, except in three instances; (1) When there has been a hearing or a decree entered; (2) When the defendant asks or deserves affirmative relief; (3) When the dismissal will deprive the defendant of some substantial right which has accrued since the suit was brought. American Steel & Wire Co. v. Mayer & Englund Co., 123 F. 204 (N. Y. 1903).

Right to Dismiss Complaint After Testimony Taken

C. C. Conn. 1908: Complainant may not, at the beginning of taking rebuttal testimony, give notice that it would dismiss the bill of complaint so far as it charged infringement of one of the patents sued on, and proceed upon the other patent in suit, even though such notice is perfected, where the proofs taken prior to the rebuttal clearly show the invalidity of the first mentioned patent, "It would be a perversion of justice to stop at the point of find that" such patent "is not infringed. It is clearly invalid, and the decree which will follow this opinion must say so."

Time Saver Co. v. Stamford Trust Co. Same v. Pequonnock Nat. Bank, 165 F. 348.

Motion to Dismiss Bill at Final Hearing

A motion by the complainant to have its bill dismissed without prejudice, upon payment of defendant's costs made at final hearing, after a preliminary injunction has been issued (though addressed to the sound discretion of the Court) will not be granted where such proceedings have been taken as entitled the defendant to a decree adjudicating the questions at issue upon the merits, nor where similar suits are pending in other districts, based upon the same patents. Georgia Pine Turpentine Co. v. Bilfinger, et al., 129 F. 131 (N. C.).

[fol. 350] Discontinuance Without Prejudice—Refusal of Leave

C. C. A. 2nd, Cir. 1919: Where a complainant had obtained a favorable adjudication on its patent in one district, which entitled it, on application, to a preliminary injunction as of course in a pending suit in another district, it was not error for the Court to refuse permission to discontinue the second suit without prejudice. Individual Drinking Cup Co. v. Union News Co., 250 F. 625.

The foregoing show the different ways in which the Courts have applied the rule, for which defendant is contending and it would appear that plaintiff is merely trifling with the Court in making such a motion at this stage.

I would call attention to the fact that as to Exhibit "M" referred to in Mr. Otis' last affidavit, there is not a scintilla of proof in plaintiff's moving papers (forming part of the record on final hearing in this case) that this Exhibit "M" was purchased from defendant, or that defendant ever made or sold the same. There is no proof that defendant ever made or sold a "coupler" like unto the spurious "coupler" portrayed by the drawing attached to Mr. Hansmann's affidavit.

I cannot refrain in conclusion from adverting to plaintiff's tactics in putting defendant, The R. M. Hollingshead Company in the Memphis suit to all the expense possible and vexing and harassing that defendant just as it is en-

deavoring to do with the instant defendant. Notwithstanding, R. M. Hollingshead Co. has its main place of business in Camden, in the District of New Jersey, where there are four experienced patent Judges almost constantly sitting—plaintiff brought this Tennessee suit against The R. M. Hollingshead Co. in Memphis, which is a trip of two nights and a day from Camden, and for Camden or Philadelphia counsel to go to Memphis and return to attend any hearing there, it requires the best part of a week at an expense of something under a thousand dollars. Inasmuch as the instant case has already been argued, it is respectfully submitted that plaintiff's motion to dismiss should be denied and the orderly procedure of a cause in equity not departed from.

I am familiar with all the defendant's records in the Bassick Co.'s litigations decided by the Courts of Appeal in the Sixth and Seventh Circuits and I believe that not only were the issues of infringement different there, but [fol. 351] none of such defendant's records were as full and complete as the instant defendant's records, which may account for the plaintiff's sudden resolution to attempt to dismiss this cause without prejudice, notwithstanding it has already been argued on final hearing.

E. Hayward Fairbanks.

Sworn to and subscribed before me, this 27th day of February, 1928. Nettie Bussinger. Commission expires Mch. 2, 1929.

EXHIBIT "A" (SEMPLE AFFIDAVIT)

The Bassick Manufacturing Co.

Alemite Products

2650 North Crawford Avenue,

Chicago, Illinois

December 5, 1927.

Mr. Frank J. Semple, % The Frank Miller Co., Hollingshead Bldg., Camden, New Jersey.

DEAR SIR:

We contemplate adding to our line and distribution a number of products substantially like some of those which

you handle under the Frank Miller name. The idea is to put them up in cans and bottles having the "Alemite" trade mark and to distribute them through our present organization.

Although we are now engaged in litigation because of your infringement of our patents covering the Alemite and Zerk lubricating apparatus, in which you are endeavoring to have our patents held invalid, we should like in connection with these new products to avoid the expense and liability of retaliatory patent litigation on your part. We are therefore writing you directly to ascertain whether you have patents covering any of the following products. If so, we would appreciate your giving us the numbers and dates of such patents, thereby enabling us to avoid their infringement, or to ascertain their validity, etc.

[fol. 352] As to those products which are patented, you might be willing to sell them to us in bulk or put up in Alemite cans or bottles supplied by us and at prices which would be mutually advantageous. We are particularly interested in:

Tire Enamel
Tire Cover
Rubber Cement
Rim and Gasket Cement
Top Patch Cement
Body Patch Outfit
Rubber Patch Outfit
Dry Cleaner
Tar and Road Oil Remover
Radiator Leak Preventative
Radiator Anti-Freeze Compound
Neats Foot Clutch Compound
Reflector Polish
Auto Body Polish
Nickel polish
Metal Polish
Wax Auto Finish
Lusterize
Rain Spot Remover
Polishing Cloth
Auto Soap
Brilliant Polish
Black Automobile Enamel

Engine Enamel
Repair Enamel
Khaki Lining Dressing
Auto Top Dressing
Leather Dressing
Cushion Dressing.

We are anxious to get the details of this matter settled as quickly as possible, and would therefore appreciate a prompt reply.

Yours very truly, The Bassick Manufacturing Co.,
by J. E. Otis, Jr., Vice President.

[fol. 353] EXHIBIT "B" (SEMPLE AFFIDAVIT)

Copy

Frank C. Miller, President. Cable Address: Miller Camden
F. J. Semple, Vice President. Bentley's and all Codes

The Frank Miller Co.

(Emblem) Manufacturers of

Chemical Specialties for the Automobile,

Saddlery and Household Trades

Camden, New Jersey

December 10th, 1927.

The Bassick Manufacturing Co., 2650 N. Crawford Avenue, Chicago, Ill.

Attention Mr. Otis, Vice-Pres.

DEAR SIRS:

We have your letter of the 5th inst.

We note your plan of adding to your distribution a line of automobile specialties and other preparations similar to our line.

We shall be glad to cooperate with you to this end, and we believe that we could no doubt supply you with our preparation as suggested by you, either in bulk or put up

in final containers with your trade mark "Alemite," at mutually advantageous prices and probably with a saving to you of all difficulties and uncertainties of possible litigation commonly incident to the entry into a new line of manufacture.

With a view of going into details of your plan as quickly as possible, as suggested by you, we shall be pleased to arrange for a conference either at your offices or ours, at our mutual convenience.

Yours very truly, The Frank Miller Company, by

—— ——.

[fol. 354] EXHIBIT "C" (SEMPLE AFFIDAVIT)

The Bassick Manufacturing Co.

Alemite Products

2650 North Crawford Avenue,

Chicago, Illinois

December Twenty-second 1927.

The Frank Miller Co., Camden, N. J.

Attention Mr. W. R. DeLong

GENTLEMEN:

This will acknowledge your letter of December 10, advising that you would be glad to cooperate with us in working out a line of automotive specialties.

We have decided to hold this matter in abeyance until after the first of the year, at which time we will doubtless get in touch with you again.

Yours very truly, The Bassick Manufacturing Co.,
J. E. Otis, Jr., Vice President.

J. E. Otis, Jr.:FAN.

EXHIBIT "D" (SEMPLE AFFIDAVIT)

Jan. 9, 1928.

The Bassick Mfg. Co., 2650 No. Crawford Ave., Chicago, Ill.

Attention J. E. Otis, Jr.

GENTLEMEN:

Since your letter of Dec. 22nd we haven't heard from you as to when it will be convenient for you to take up the matter of Auto Specialties mentioned in a previous letter to us.

We will be glad if you will advise us if it will be convenient to take this matter up at your office the latter part of this week.

Yours very truly, The Frank Miller Co.

RF.

[fol. 355] EXHIBIT "E" (SEMPLE AFFIDAVIT)

Western Union

Chicago, Ill., January 10, 1928.

Confirmation—Mr. M. R. DeLong, The Frank Miller Co., Camden, N. J.:

Re letter ninth Mister Otis out of town will not return until latter part of month when letter will receive his attention.

The Bassick Manufacturing Co.—Neuffer.

Paid.
Chge. Western Union Acct.—Fan.
10:10 A. M.

EXHIBIT "F" (SEMPLE AFFIDAVIT)

Jan. 27, 1928.

The Bassick Mfg. Co., 2650 No. Crawford Ave., Chicago, Ill.

Attention: J. E. Otis, Jr.

GENTLEMEN:

On Jan. 9th we wrote you asking that you kindly advise us when it would be convenient to take up the matter of Auto Specialties mentioned in your previous letter to us.

On the 10th instant we received a telegram to the effect that you would be out of town until the latter part of the month.

We will be glad if you will advise us, if it will be convenient to take this matter up, during the next week, on a day that would be convenient to you.

Yours very truly, The Frank Miller Co.

RF.

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(Here follow photolithographs, side folios 356-366.)

Management: OFFICERS: W. Westerman, Pres; E. P. De Monchy Rzn, Vice-Pres.; W. A. Mees, Sec. DIRECTORS: W. Westerman, D. G. van Bueningen, Dr. A. G. Kröller, Ir. W. F. Leemans, The Hague; E. P. DeMonchy Rzn, Th. A. Fruin, W. A. Mees, C. W. F. P. Baron Sweerts de Landas Wyborgh, J. H. Veder, Rotterdam; S. P. van Eeghen, Dr. A. F. Van Hall, P. Hofstede de Groot, Amsterdam; Jan. Lels, Ir. J. A. Kalff. MANAGING DIRECTORS: J. Rijperda Wierdsma, Chairman, A. Gips, W. F. Piek, F. s'Jacob, Rotterdam. ANNUAL MEETING: In March. OFFICE: Rotterdam. NEW YORK OFFICE: 24 State St.

Comparative Income Account, Years Ended Dec. 31

(*In guilders*)

	1926	1925	1924	1923	1922	1921
Net income	7,463,308	3,508,706	3,950,432	2,740,705	2,194,143	10,754,344
Depreciation	5,390,421	6,292,881	6,358,358	6,369,414	5,877,390	7,542,063
Interest charges	1,840,927	1,694,149	1,879,165	1,882,285	570,482	.....
Miscellaneous	114,372	17,656	112	4,639	30,356	472,456
Dividends	.....	.....	.....	.....	.....	2,726,250
Surplus	117,588	(d)4,495,980	(d)4,287,203	(d)5,515,633	(d)4,284,085	13,575

Division of Profits. After deduction of expenses, fixed charges, etc., stockholders are entitled to a dividend of 5% over the paid capital. From the balance the board of managing directors receive 12½%, the directors 2½%, the consortium 5% and stockholders 80%, of which a part at the discretion of the directors is available for the creation of a special reserve fund.

Comparative Balance Sheet, as of Dec. 31

(*In guilders*)

ASSETS:	1926	1925	LIABILITIES:	1926	1925
Property and plant (net)	3,350,002	3,550,002	Capital stock	25,000,000	25,000,000
Steamships (net)	63,008,843	68,688,843	Bonded debt	30,000,000	30,000,000
Interest in other cos	17,381,954	21,793,833	Accounts payable	4,409,129	3,256,036
Cash	7,272,773	1,389,232	Reserves	29,608,784	29,512,022
Notes and bills receivable	3,278,738	1,970,944	Miscellaneous liabilities	11,673,916	14,459,195
Accounts receivable	5,253,544	3,081,276	Undivided profits	26,701	26,701
Prepaid charges	226,181	328,552	Surplus	117,588	.....
Miscellaneous assets	1,064,083	1,460,272			
Total	100,836,118	102,253,954	Total	100,836,118	102,253,954

Bonded Debt: 1. Holland-America Line 25-year sinking funds 6s:

Authorized—30,000,000 guilders; outstanding, 30,000,000 guilders.

Dated—May 1, 1922; due May 1, 1947.

Interest Payable—M&N 1 in New York at office of White, Weld & Co. or at the office of R. Mees & Zoonen, Rotterdamsche Bankvereeniging or Amsterdamsche Bank, all in Rotterdam, Amsterdam and the Hague. Bonds and coupons are payable in the Netherlands in guilders and in New York in U. S. dollars at the official rate of exchange, i. e. the rate of exchange for sight drafts for guilders of the Kingdom of the Netherlands and gold dollars of the United States, fixed by the New York official opening on the respective days on which bonds and coupons are presented to the bankers, and failing such official quotation the average opening quotation of 2 leading banks dealing in foreign exchange at New York, selected by the bankers.

Trustee—Nederlandsche Administratie Trustkantoor (Netherlands Administration and Trust Office), Amsterdam.

Denomination—Coupon, 500 and 2,500 guilders.

Callable—Non-callable except for sinking fund.

Sinking Fund—Beginning May 1, 1928, sufficient to retire by annual drawings one-twentieth of the issue at par and interest, thus retiring the entire issue by maturity.

Security—A direct obligation of the company. There is no mortgage on existing property of the company and company agrees that none will be created while these bonds are outstanding.

Purpose—Proceeds used for the completion of the building of 3 passenger steamers aggregating 42,400 tons and 9 cargo steamers aggregating 98,200 tons.

Listed—On New York and Amsterdam stock Exchanges.

Tax Status—Free of all taxes of the Kingdom of the Netherlands. Company does not pay U. S. normal income tax. Rating Baa

Offered—(20,000,000 guilders) in April, 1922 at $920 flat per 2,500 guilders by White, Weld & Co., and Blair Co., New York; balance (10,000,000 guilders) offered simultaneously in Holland by Rotterdamsche Bankvereeniging, Amsterdamsche Bank, and R. Mees & Zoonen.

Price Range	1926	1925	1924	1923
High	93⅞	89¾	84½	92
Low	78¾	79	72	71

Capital Stock: 1. Holland-American Line stock: Authorized, 50,000,000 guilders; outstanding, 25,000,000 guilders. Original capitalization was 2,000,000 guilders of 1,000 guilders par value. Par reduced to 500 guilders in 1876 when a 50% reduction in capitalization was ordered. In 1881 capitalization was increased by 1,000,000 guilders, in 1890, 2,000,000 in 1899, 2,000,000 and in 1901 2,000,000. In 1902 the authorized capital was increased to 20,000,000 and in 1920 to 50,000,000. Initial dividend of 2.975% paid in 1874. Nothing was paid during 1875-1878. In 1879, 5% was paid; 1880, 5%; 1881, 10%; 1882, 9%; 1883 to 1887, none; 1888, 11%; 1889, 17%; 1890 to 1897, none. In 1898 dividends were again resumed and continued without interruption, ranging between 2½% in 1898 and 50% in 1915. In 1918, 40%; 1919, 50%; 1920, 25%; 1921, 10%; none thereafter to Dec. 31, 1926. In addition extra dividends have been paid ranging from 2 guilders in 1898 to 320.30 guilders in 1915. Rating B

Stock transferred and registered at company's office, New York. Listed on Rotterdam, Amsterdam, The Hague and Brussels stock Exchanges.

THE R. M. HOLLINGSHEAD COMPANY

History: Incorporated under the laws of New Jersey, Dec. 31, 1897. Business established in 1890; consists of the manufacture and distribution of 98 different chemical products, chiefly for automobile and household use, such as soaps, polish, greases, enamel, leather dressing, etc., sold under the trade-name "Whiz." Plant located at Camden, N. J., contains 255,000 sq. ft. of floor space. Also operates a 4-story plant at Bowmanville, Ont., and a 7-story administration and warehouse building at Camden, N. J. Maintains 37 branches and 25 warehouses in the United States, Canada and Cuba.

R. M. Hollingshead Corp.: Incorporated under Delaware laws in May, 1925. Owns entire outstanding class B common stock and approximately 95% of class A common stock of The R. M. Hollingshead Co. Also owns entire common stock of The Frank Miller Co. of Camden, N. J. Latter distributes a line of products similar to those of The R. M. Hollingshead Co. but sells only to jobbers. Practically entire capital stock of R. M. Hollingshead Corp. is owned by officers and employees of The R. M. Hollingshead Co.

Management: (R. M. Hollingshead Co.) OFFICERS: R. M. Hollingshead, Pres,; R. M. Bagley, Vice-Pres. and Sec.; C. W. Tomlinson, Treas. DIRECTORS: R. M. Hollingshead, R. M. Bagley, C. W. Tomlinson. GENERAL AUDITORS: Ernst & Ernst, COMPANY'S OFFICE: Camden, N. J.

Comparative Income Account, Years Ended Dec. 31

	1926	1925	1924	1923	1922	*1921
Net sales	$5,605,338	$5,802,300	$5,744,342	$4,995,943	$3,468,852	$2,411,556
Oper. expenses and deprec...	5,460,757	5,442,517	5,107,808	4,432,348	3,033,482	2,263,112
Net income	$144,581	$359,783	$636,534	$563,595	$435,370	$148,444
Margin of profit	*2.58%*	*6.20%*	*11.08%*	*11.28%*	*12.55%*	*6.16%*
Other income	11,087	17,964	23,827	14,449	9,236	6,738
Total income	$155,668	$377,747	$660,361	$578,044	$444,606	$155,182
Interest charges	87,566	83,549	99,883	72,528	28,436	30,323
Balance	$68,102	$294,198	$560,478	$505,516	$416,170	$124,859
Taxes	1,400	32,400	68,265	60,161	44,501	18,562
Other charges	9,847	13,138	12,103	6,740	.....	.....
Balance for dividends	$57,355	$248,660	$480,110	$438,615	$371,669	$106,297
Preferred dividends	94,374	34,102	11,856	11,856	11,856	30,651
Common dividends	218,750	36,836	66,802	62,376	20,792	
Surplus	(d) $255,769	$177,722	$401,452	$364,383	$339,021	$75,646
Earned per share, preferred	$4.25	$18.44	$35.61	$32.53	$27.57	$7.88
Earned per share, common..	.....	0.51	1.29	1.15	0.92	0.04

*Year ended Sept. 30. †Based on new capitalization.

Comparative Balance Sheet, as of Dec. 31

ASSETS:	1926	1925	LIABILITIES:	1926	1925
Plant and equipment	$1,909,703	$1,574,752	Capital stock	†$2,885,250	$2,885,250
Good-will, trade-marks, etc.	1	1	Bonded debt	900,000	950,000
Invest. in sub. and affil. cos.	269 109	287,205	*Notes payable*	*750,000*	*225,000*
Cash	*209,935*	*339,621*	*Accounts payable*	*167,037*	*136,441*
Accounts receivable	*1,506,157*	*1,513,437*	*Accruals*	*45,406*	*37,986*
Inventories	*1,134,616*	*880,273*	*Affiliated company accounts*	*81,291*	.....
Life insurance, cash value	*41,900*	.....	*Federal taxes*	*1,400*	*32,400*
Treasury bonds	28,653	129,069	Sinking fund reserve	108,000	58,000
Other assets	63,764		Surplus	436,013	688,623
Deferred charges	210,559	289,342			
Total	$5,374,397	$5,013,700	Total	$5,374,397	$5,013,700

*After depreciation. †Represented by 13,482 preferred, 275,000 class A and 25,000 class B no par shares.

Working Capital: *1925, current assets, $2,733,331; current liabilities, $431,827; net current assets, $2,301,504.*
1926, current assets, $2,892,608; current liabilities, $1,045,134; net current assets, $1,847,474.

Table A—Bond Records

R. M. Hollingshead Co. 1st 7s..... Interest Payable F&A — Maturity F. 1, 1938 — Authorized $1,000,000

Outstanding	Five Year Average Income	Interest Required per Annum	Times Interest Earned	Security	Salability	Rating
$872,000	$443,285	$61,040	7.3	Good	Fair	Ba

1. R. M. Hollingshead Co. first sinking fund gold 7s:
Authorized—$1,000,000; outstanding, $872,000; in reasury, $28,000; retired to Dec. 31, 1926, $100,000; in ddition $25,000 retired May 1, 1927.
Dated—Feb. 1, 1923; due Feb. 1, 1938.
Interest Paid—F&A 1 at office of Trustee.
Trustee—Bank of America, New York.
Denomination—Coupon, $500 and $1,000; registerable s to principal; interchangeable.
Callable—On any interest date, upon 30 days' notice t 105 on or before Feb. 1, 1928; at 103 on or before eb. 1, 1933; at 102 on or before Feb. 1, 1937, and at 00 thereafter.
Sinking Fund—Sufficient to retire the entire issue by naturity, beginning May 1, 1925, provides for semi-anual payments each M&N 1 as follows: $25,000 from lay 1, 1925 to Nov. 1, 1927; $30,000 May 1, 1928 to ov. 1, 1930; $35,000 May 1, 1931 to Nov. 1, 1933; $40,-00 May 1, 1934 to Nov. 1, 1936, and $110,000 May 1, 937 to and including Nov. 1, 1937.
Security—First (closed) mortgage on all fixed assets of the company now owned or hereafter acquired, provided, however, that purchase money mortgages (of not to exceed 70% of the value of the property so purchased) may be assumed. Company will not pay any cash dividends which will reduce current assets to an amount less than 135% of current liabilities, including the indebtedness evidenced by the outstanding bonds, and no cash dividends will be paid except out of earnings subsequent to Feb. 1, 1923, except that dividends not exceeding $50,000 may be paid from earnings prior to said date. Value of net tangible assets will be maintained to an amount equal to not less than 200% of the bonds outstanding.
Purpose—Issued to provide additional working capital.
Quoted—In New York.
Tax Status—Pennsylvania and Connecticut 4 mills taxes and Massachusetts 6% income tax refunded. Company pays normal income tax up to 2%.
Offered—($750,000) at par in March, 1923, by John Nickerson & Co., New York.
Price Range—1926, 101-94.

Table B—Stock Records	Rate of Dividend	Athorized	Outstanding	Five Year Average Income	Dividend Requirement	Salability	Rating
R. M. Hollingshead Co. $7 cum. pref.	$7 per sh.	20,000 sh.	13,482 sh.	$319,282	$94,374	Fair	B
R. M. Hollingshead Co. common, A..	See text	275,000 sh.	275,000 sh.		See text		Text
R. M. Hollingshead Co. common, B..	"	25,000 sh.	25,000 sh.		"		Text

1. R. M. Hollingshead Co. $7 cum. preferred: Authorized, 20,000 shares; outstanding, 13,482 shares; no par. as preference as to assets and cumulative dividends of $7 per share. In liquidation, entitled to $107.50 per share nd dividends. Callable after three years from date of issue on any dividend date on 30 days' notice at $107.50 per hare. No dividends may be paid on classes A or B stock except out of net profits earned after Jan. 1, 1925, after educting preferred dividends, nor in case such payment will reduce current assets to less than twice current liabilihares but no share in addition to 13,482 shares outstanding may be issued unless earnings available for dividends or twelve consecutive calendar months within fifteen calendar months preceding equal 2 times annual dividend reuirements on all preferred outstanding and to be issued, and net tangible assets, including proceeds from sale of stock

equal $200 per share of preferred outstanding and to be issued, and further provided that no preferred in excess of 22,000 shares may be issued, except to redeem company's first mortgage bonds, unless net tangible assets including proceeds from sale of stock equal 200% of preferred taken at $100 per share) plus first mortgage bonds outstanding. Consent of two-thirds of holders of preferred required to increase authorized preferred beyond 50,000 shares; to create any stock ranking equal or prior to preferred; or to create or assume any funded debt except purchase money mortgages, unless net tangible assets equal 200% of funded debt and preferred outstanding (taken at $100 per share). Has no voting power unless 6 quarterly dividends are in default, when it has exclusive power to elect full minority of board of directors. Issued to provide for expansion of business. Initial dividend of $1.75 paid Oct. 1, 1925. Regular dividends paid quarterly, Jan. 1, etc., to stock of record, Dec. 15, etc.

Offered (12,000 shares) in June, 1925 by John Nickerson & Co., New York, at $100 per share with bonus of one share of class A common stock.

2. R. M. Hollingshead Co. class A common: Authorized, 275,000 shares; outstanding, 275,000 shares; no par. Identical in all respects with Class B common except that class A has no voting power. Initial dividend of 25 cents paid Jan. 2, 1926; April 1 and Oct. 1, 1926, 25 cents; none thereafter to Apr. 15, 1927. R. M. Hollingshead Corp. owns about 95% of this issue.

3. R. M. Hollingshead Co. class B common: Authorized, 25,000 shares; outstanding, 25,000 shares; no par. Identical in all respects with class A except that class B has sole voting rights, with restrictions (see No. 1). Initial dividend of 25 cents paid Jan. 2, 1926; April 1, 1926, 25 cents; none thereafter to Apr. 15, 1927. All owned by R. M. Hollingshead Corp.

Transfer Agent: Bank of America, New York. Registrar: Chase National Bank, New York.

NOTE: Capital stock was revised in July, 1925. Holders of former 8% non-mumulative preferred received in exchange new $7 dividend preferred. Holders of former class A common, class B common, and founders shares received in exchange new shares of R. M. Hollingshead Corp.

THE HYDRAULIC STEEL COMPANY

History: Incorporated under the laws of the State of Ohio on December 2, 1919. The duration of its charter is perpetual. The company took over the business, assets and liabilities of its predecessors, The Hydraulic Pressed Steel Company and subsidiaries of The Hydraulic Pressed Steel Company, *i. e.*, The Canton Sheet Steel Company, The Cleveland Welding & Manufacturing Company and The Hydraulic Steelcraft Company, which concerns were engaged in manufacturing hydraulically pressed steel products, etc. Company manufactures washing machine stampings, conveyor rolls, automobile stampings, and other commercial stampings; also pressed steel parts for refrigerator cars.

Receivership and Reorganization: On Oct. 26, 1923, T. P. Goodbody was appointed receiver in equity in the United States District Court, Cleveland. In June, 1926, part of a proposed reorganization plan was carried out. Cleveland Welding Co. was organized in Ohio on June 24, 1926 and acquired the West Side properties. The new company's capitalization consists of $500,000 1st mtge. 20 year 6% gold bonds and authorized capital stock of $1,500,000 preferred, par $100 and 100,000 no par common shares. All of the preferred and 45,000 shares of the common were issued to the reorganization committee, which will transfer these holdings to a new holding company. It is also proposed to sell the East Side plant for which no bids had been received up to May, 1927. Upon completion of these transactions, holding company would also own $1,500,000 7% preferred stock and 45,000 shares of no par common stock of East Side company which securities are to be deposited as collateral for new 6% secured gold notes.

Reorganization Committee: W. C. Janney, Chairman; J. H. Mason, for noteholders; C. E. Sullivan, for bank creditors; C. E. Reichenbach, for merchandise creditors; J. A. Drain, for preferred stockholders; S. G. Duncan, Sec. DEPOSITARY FOR CREDITORS: Cleveland (Ohio) Trust Co. DEPOSITARY FOR PREFERRED STOCK: Guardian Trust Co., Cleveland. GENERAL COUNSEL: Dustin, McKeehan, Merrick; Arter & Stewart.

Management: OFFICERS: J. H. Foster, Pres.; H. F. Pettee, Sec.; R. E. Hayslett, Treas., Cleveland, O. DIRECTORS: J. H. Foster, H. P. McIntosh, Sr., H. P. McIntosh, Jr., H. F. Pettee, H. B. Bole, T. P. Goodbody, A. H. Richards, W. C. Janney. ANNUAL MEETING: Fourth Friday in October. OFFICE: 6100 Hydraulic Ave., Cleveland, Ohio.

Comparative Income Account, Years Ended Oct. 31

	1926	1925	*Oct. 31, '24	June 30, '23	June 30, '22	June 30, '21
Net sales	$3,360,566	$5,062,195	$5,149,500	$6,122,230	$4,759,384	$10,481,050
Operating expenses	2,973,282	3,536,419	4,382,599	5,599,063	4,238,189	9,985,276
General expenses, taxes	193,085	1,157,595	291,855	409,921	690,531	1,486,874
Depreciation, etc.	141,927	187,409	160,545	134,134	173,976	254,369
Adjustments	.....	15,399	33,110	57,528	128,606	383,829
Net income	(d) $52,272	$165,373	$281,391	(d) $78,416	(d) $471,918	(d) $1,629,298
Interest charges	.....	.....	.....	251,174	384,356	254,604
Balance	.....	.....	.....	(d) $329,590	(d) $856,274	(d) $1,883,902
Preferred dividends	.....	.....	.....	.....	.....	294,673
Common dividends	.....	.....	.....	.....	.....	378,752
Net profit	.....	.....	.....	(d) $329,590	(d) $856,274	(d) $2,557,327

*Period Oct. 27, 1923, to Oct. 31, 1924.

Receiver's Comparative Balance Sheet, as of Oct. 31

ASSETS:	1926	1925	LIABILITIES:	1926	1925
Property and equipment	$3,668,083	$6,320,506	Preferred stock	$5,998,900	$5,998,900
Patents and rights	.....	1,060	Common stock	*1,472,592	1,472,592
Securities	.....	107,437	Bonded debt	2,851,300	2,851,300
Cash	462,081	477,645	Liability on building	.....	194,641
Notes and acceptances, rec.	10,489	50,465	Receiver's accts. pay.	65,949	.....
Accounts receivable	211,227	496,602	Receiver's accruals	86,210	.....
Inventories	398,649	823,648	Notes payable	274,558	276,958
Other assets	31,430	11,834	Accounts payable	385,674	525,911
Deferred charges	10,499	18,197	Accrued items	163,704	251,724
Deficit	6,925,115	3,617,940	Reserves	418,686	353,308
Total	$11,717,573	$11,925,334	Total	$11,717,573	$11,925,334

*Represented by 294,518 no par shares.

Bonded Debt: 1. The Hydraulic Steel Co. 8% sinking fund gold notes: Authorized, $4,000,000; outstanding, $2,851,300. Dated Nov. 1, 1920; due Nov. 1, 1930. Interest paid M&N 1, at Bankers Trust Co., New York, Trustee and at Guardian Trust Co., Cleveland, Ohio, Co-Trustee. Coupon, $100, $500 and $1,000 denominations, interchangeable, registerable as to principal only. Callable at 107½ on 30 days' notice. Annual sinking fund 2½% of maximum amount of notes issued to purchase notes at not over 107½. Issued, $3,500,000 of which $648,700 acquired and held in treasury as of Oct. 13, 1926. Direct obligation of the company. The indenture provides that no mortgage can be placed on property.

Comparative Income Account, Years Ended Dec. 31
(In Guilders)

	1925	1924	1923	1922	1921
Net income	3,508,706	3,950,432	2,740,705	2,194,143	10,754,344
Depreciation	6,292,881	6,358,358	6,369,414	5,877,390	7,542,063
Interest charges	1,694,149	1,879,165	1,882,285	570,482	.....
Miscellaneous	17,656	112	4,639	30,356	472,456
Dividends	.....	.....	.....	.....	2,726,250
Surplus	(d)4,495,980	(d)4,287,203	(d)5,515,633	(d)4,284,085	13,575

Division of Profits: After deduction of expenses, fixed charges, etc., stockholders are entitled to a dividend of 5% over the paid capital. From the balance the board of managing directors receive 12½%, the directors 2½%, the consortium 5% and stockholders 80%, of which a part at the discretion of the directors is available for the creation of a special reserve fund.

Comparative Balance Sheet, as of Dec. 31
(In Guilders)

Assets:	1925	1924	Liabilities:	1925	1924
Property and plant (net)	3,550,002	3,800,002	Capital stock	25,000,000	25,000,000
Steamships (net)	68,688,843	74,608,842	Bonded debt	30,000,000	30,000,000
Interest in other cos.	21,793,833	22,224,022	Accounts payable	3,256,036	4,708,216
Cash	1,380,232	2,162,215	Reserves	29,512,022	34,310,283
Notes and bill receivable	1,970,944	1,631,786	Miscellaneous liabilities	14,459,195	16,486,205
Accounts receivable	3,081,276	4,735,720	Undivided profits	26,701	26,701
Prepaid charges	328,552	312,552			
Miscellaneous assets	1,460,272	1,056,266			
Total	102,253,954	110,531,405	Total	102,253,954	110,531,405

Bonded Debt: 1. Holland-America Line 25-year sinking fund 6s: Authorized, 30,000,000 guilders; outstanding, 30,000,000 guilders. Dated May 1, 1922; due May 1, 1947. Interest payable M&N 1, in New York at office of White, Weld & Co., or at the offices of R. Mees & Zoonen, Rotterdamsche Bankvereeniging or Amsterdamsche Bank, all in Rotterdam, Amsterdam and the Hague Nederlandsche Administratie Trustkantoor (Netherlands Administration) and Trust Office, Amsterdam, Trustee. Bonds and coupons are payable in the Netherlands in guilders, and in New York in U. S. dollars at the official rate of exchange, i. e. the rate of exchange for sight drafts for guilders of the Kingdom of the Netherlands and gold dollars of the United States, fixed by the New York official opening on the respective days on which bonds and coupons are presented to the bankers, and failing such official quotation the average opening quotation of 2 leading banks dealing in foreign exchange at New York, selected by the bankers. Coupon 500 and 2,500 guilders. Non-callable except for sinking fund. A sinking fund is provided beginning May 1, 1927, to retire by annual drawings one-twentieth of the issue at par and interest, thus retiring the entire issue by maturity. A direct obligation of the company. There is no mortgage on existing property of the company and company agrees that none will be created while these bonds are outstanding. Proceeds used for the completion of the building of 3 passenger steamers aggregating 42,400 tons and 9 cargo steamers aggregating 98,200 tons. Listed on New York and Amsterdam Stock Exchanges. Free of all taxes of the Kingdom of the Netherlands. Company does not pay U. S. normal income tax. Rating Baa

Offered (20,000,000 guilders) in Apr., 1922 at $920 flat per 2,500 guilders by White, Weld & Co., and Blair Co., New York; balance (10,000,000 guilders) offered simultaneously in Holland by Rotterdamsche Bankvereeniging, Amsterdamsche Bank, and R. Mees & Zoonen.

Price Range:	1925	1924	1923
6s, 1947	89¾-79	84½-72	92-71

Capital Stock: 1. Holland-American Line stock: Authorized, 50,000,000 guilders; outstanding, 25,000,000 guilders. Original capitalization was 2,000,000 guilders of 1,000 guilders par value. Par reduced to 500 guilders in 1876 when a 50% reduction in capitalization was ordered. In 1881 capitalization was increased by 1,000,000 guilders, in 1890, 2,000,000 in 1899, 2,000,000 and in 1901 2,000,000. In 1902 the authorized capital was increased to 20,000,000 and in 1920 to 50,000,000. Initial dividend of 2.975% paid in 1874. Nothing was paid during 1875-1878. In 1879, 5% was paid; 1880, 5%; 1881, 10%; 1882, 9%; 1883 to 1887, none; 1888, 11%; 1889, 17%; 1890 to 1897, none. In 1898 dividends were again resumed and continued without interruption, ranging between 2½% in 1895 and 50% in 1915. In 1918, 40%; 1919, 50%; 1920, 25%; 1921, 10%; none thereafter to Dec. 31, 1925. In addition extra dividends have been paid ranging from 2 guilders in 1898 to 320.30 guilders in 1915. Rating, B

Listed on Rotterdam, Amsterdam, The Hague and Brussels Stock Exchanges.

THE R. M. HOLLINGSHEAD COMPANY

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PUBLIC UTILITY SECURITIES

Moody's Public Utility Manual, containing 2,000 pages of information and statistics, gives complete descriptive data on approximately 2,000 public service corporations of every type, with history, operating statistics, comparative income statements and balance sheets. Dividend records are shown, as well as earning power, "margin of safety," surplus, etc. About 5,500 public utility bond and stock issues are fully described and analyzed, with Moody's Ratings indicated.

The great and growing interest in public utility securities makes this volume of our Manuals unusually valuable to the investor and banker. Cost, $25.

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Comparative Income Account, Years Ended Dec. 31

	1925	1924	1923	1922	*1921	*1920
Net sales	$5,802,300	$5,744,342	$4,995,943	$3,468,852	$2,411,556	$2,547,844
Oper. expenses and deprec.	5,442,517	5,107,808	4,432,348	3,033,482	2,263,112	2,372,155
Net income	$359,783	$636,534	$563,595	$435,370	$148,444	$175,689
Margin of profit	*6.20%*	*11.08%*	*11.28%*	*12.55%*	*6.16%*	*6.90%*
Other income	17,964	23,827	14,449	9,236	6,738	1,050
Total income	$377,747	$660,361	$578,044	$444,606	$155,182	$176,739
Interest charges	83,549	99,883	72,528	28,436	30,323	20,894
Balance	$294,198	$560,478	$505,516	$416,170	$124,859	$155,845
Taxes	32,400	68,265	60,161	44,501	18,562	33,997
Other charges	13,138	12,103	6,740	.....	.....	.....
Balance for dividends	$248,660	$480,110	$438,615	$371,669	$106,297	$121,848
Preferred dividends	34,102	11,856	11,856	11,856	30,651	29,944
Common dividends	36,836	66,802	62,376	20,792		
Surplus	$177,722	$401,452	$364,383	$339,021	$75,646	$91,904
†Earned per share, preferred	$18.44	$35.61	$32.53	$27.57	$7.88	$9.04
†Earned per share, common	0.51	1.29	1.15	0.92	0.04	0.09

*Years ended Sept. 30. †Based on new capitalization.

Comparative Balance Sheet, as of Dec. 31

ASSETS:	1925	1924	LIABILITIES:	1925	1924
Property and equipment	$1,726,696	$1,084,284	Preferred stock	†$3,573,873	$148,200
Good-will, trade-marks, etc.	1	1	Common stock		1,709,650
Investments in affil. cos.	100,000	101,000	Bonded debt	950,000	1,000,000
Advances to affil. cos.	37,180	137,639	*Notes & accounts payable*	*361,441*	*580,956*
Treasury bonds	55,000	.....	*Accrued liabilities*	*37,986*	*39,644*
Cash	*339,621*	*247,613*	*Reserve for Federal taxes*	*32,400*	*68,265*
Accounts receivable	*1,648,669*	*1,479,531*	Reserve for sinking fund	58,000	23,106
Inventories	*880,273*	*843,093*	Reserve for depreciation	151,944	93,710
Other assets	224,093	234,887	Other reserves	135,232	107,495
Deferred charges	289,343	258,019	Surplus	.....	615,041
Total	$5,300,876	$4,386,067	Total	$5,300,876	$4,386,067

†Represented by 13,482 preferred, 275,000 class A and 25,000 class B no par shares.

Working Capital: *1924, current assets, $2,570,237; current liabilities, $688,865; net current assets, $1,881,372.*
1925, current assets, $2,868,563; current liabilities, $431,827; net current assets, $2,436,736.

Table A—Bond Records	Interest Payable	Maturity	Authorized
1. R. M. Hollingshead Co. 1st 7s	F&A	F. 1, 1938	$1,000,000

Outstanding	Five Year Average Income	Interest Required per Annum	Factor of Safety	Security	Salability	Rating
$895,000	$443,188	$62,650	86%	Good	Fair	Baa

1. R. M. Hollingshead Co. first sinking fund gold 7s: Dated Feb. 1, 1923; due Feb. 1, 1938. Interest paid F&A 1, at Bank of America, New York, Trustee. Coupon, $500 and $1,000; registerable as to principal; interchangeable. Callable as a whole, or in part, on any interest date, upon thirty days' notice at 105 and interest on or before Feb. 1, 1928; at 103 and interest on or before Feb. 1, 1933; at 102 and interest on or before Feb. 1, 1937, and at 100 and interest thereafter. An annual sinking fund, sufficient to retire the entire issue by maturity, becomes operative May 1, 1925, and provides for semi-annual payments each M&N 1, as follows: $25,000 from May 1, 1925 to Nov. 1, 1927; $30,000 May 1, 1928 to Nov. 1, 1930; $35,000 May 1, 1931, to Nov. 1, 1933; $40,000 May 1, 1934 to Nov. 1, 1936, and $110,000 May 1, 1937 to and including Nov. 1, 1937. Authorized, $1,000,000; outstanding, $895,000; in treasury, $55,000; retired to Dec. 31, 1925, $50,000. Secured by a first (closed) mortgage on all fixed assets of the company now owned, or hereafter acquired, provided, however, that purchase money mortgages (of not to exceed 70% of the value of the property so purchased) may be assumed. It is provided that so long as any of the bonds remain outstanding and unpaid, the company will not pay any cash dividends which will reduce current assets to an amount less than 185% of current liabilities, including the indebtedness evidenced by the outstanding bonds, and that no cash dividends will be paid except out of earnings subsequent to Feb. 1, 1923, except that dividends not exceeding $50,000 may be paid from earnings prior to said date; that it will maintain the value of the net tangible assets to an amount equal to not less than 200% of the bonds outstanding. Issued to provide additional working capital. Pennsylvania and Connecticut State taxes and Massachusetts income tax refunded. Company pays normal income tax up to 2%.

Offered ($750,000) at par in March, 1923 by John Nickerson & Co., New York.

Table B—Stock Records	Rate of Dividend	Authorized	Outstanding	Five Year Average Income	Dividend Requirement	Salability	Rating
1. R. M. Hollingshead Co. $7 cum. pref.	$7 per sh.	20,000 sh.	13,482 sh.	$329,070	$94,374	Fair	Ba
2. R. M. Hollingshead Co. common, A.	$1 per sh.	275,000 sh.	275,000 sh.	234,696	275,000	.....	Text
3. R. M. Hollingshead Co. common, B.	$1 per sh.	25,000 sh.	25,000 sh.	.....	25,000	.....	Text

1. R. M. Hollingshead Co. $7 cum. preferred: Authorized, 20,000 shares; outstanding, 13,482 shares; no par. Has preference as to assets and cumulative dividends of $7 per share. In liquidation, entitled to $107.50 per share and dividends. Callable after three years from date of issue on any dividend date on 30 days' notice at $107.50 per share. No dividends may be paid on classes A or B stock except out of net profits earned after Jan. 1, 1925, after deducting preferred dividends, nor in case such payment will reduce current assets to less than twice current liabilities or surplus to less than $21 per share of outstanding preferred. Authorized preferred may be increased to 50,000 shares but no share in addition to 13,482 shares outstanding may be issued unless earnings available for dividends for twelve consecutive calendar months within fifteen calendar months preceding equal 3 times annual dividend requirements on all preferred outstanding and to be issued, and net tangible assets, including proceeds from sale of stock equal $200 per share of preferred outstanding and to be issued, and further provided that no preferred in excess o 22,000 shares may be issued, except to redeem company's first mortgage bonds, unless net tangible assets including proceeds from sale of stock equal 200% of preferred (taken at $100 per share) plus first mortgage bonds outstanding. Consent of two-thirds of holders of preferred required to increase authorized preferred beyond 50,000 shares; to create any stock ranking equal or prior to preferred; or to create or assume any funded debt except purchase money mortgages, unless net tangible assets equal 200% of funded debt and preferred outstanding (taken at $100 per

share). Has no voting power unless 6 quarterly dividends are in default, when it has exclusive power to elect full minority of board of directors. Issued to provide for expansion of business. Initial dividend of $1.75 paid Oct. 1, 1925. Regular dividends paid quarterly, Jan. 1, etc., to stock of record, Dec. 15, etc.

Offered (12,000 shares) in June, 1925 by John Nickerson & Co., New York, at $100 per share with bonus of one share of class A common stock.

2. R. M. Hollingshead Co. class A common: Authorized, 275,000 shares; outstanding, 275,000 shares; no par. Identical in all respects with class B common except that class A has no voting power. Initial dividend of 25 cents paid Jan. 2, 1926; April 1, 1926, 25 cents. Dividends payable quarterly, Jan. 1, etc., to stock of record, Dec. 15, etc. R. M. Hollingshead Corp. owns about 95% of this issue.

3. R. M. Hollingshead Co. class B common: Authorized, 25,000 shares; outstanding, 25,000 shares; no par. Identical in all respects with class A except that class B has sole voting rights, with restrictions (see No. 1). Initial dividend of 25 cents paid Jan. 2, 1926; April 1, 1926, 25 cents. Dividends payable quarterly, Jan. 1, etc. to stock of record, Dec. 15, etc. All owned by R. M. Hollingshead Corp.

Transfer Agent: Bank of America, New York. Registrar: Chase National Bank, New York.

NOTE: Capital stock was revised in July, 1925. Holders of former 8% non-cumulative preferred received in exchange new $7 dividend preferred. Holders of former class A common, class B common, and founders shares received in exchange new shares of R. M. Hollingshead Corp.

HOLLY SUGAR CORPORATION

History: Incorporated April 4, 1916, under New York laws to acquire the stock of the Holly Sugar Co., incorporated in 1905 in Colorado. Latter company owns modern beet sugar refineries at Swink, Colorado, and Huntington Beach, California. Corporation formerly owned approximately all the capital stock of the Sheridan Sugar Co., which was dissolved in 1920 and plant and property including new refinery at Sheridan, Wyoming, conveyed to Holly Sugar Corp. In 1920, also completed new modern plant at Delta, Colo., which is in full operation. Combined slicing capacity of plants is about 8,500 tons of beets per day. Other plants at Grand Junction, Colo., Santa Ana, Calif., and Sidney, Mont.

Midland Sugar Co.: Incorporated in 1924. Owns a factory site, beet dumps and other equipment at Sidney, Mont., where a beet sugar factory was under construction in March 1925. Plant will be leased to and operated by the Holly Sugar Corp. for five years at a minimum rental sufficient to cover taxes, insurance, interest and annual principal installments on bonds. Capitalization of Midland Sugar Co. consists of $600,000 1st serial 6s and 10,000 no par shares, latter being all owned by Holly Sugar Corp.

Holly Northern Sugar Co.: Owns a factory site and had under construction, in May, 1926, a beet sugar factory at Torrington, Wyo. with beet sheds, dumps and equipment to produce 45,000,000 pounds of beet sugar per annum. Property to be leased to Holly Sugar Corp. at rental sufficient to meet all interest and maturities on bonds outstanding, taxes and repairs and all corporate charges. Company is successor to Wyoming-Nebraska Sugar Co. For bonds outstanding, see Bonded Debt No. 3. Stock all owned by Holly Sugar Corp.

Subsidiaries: Company owns the entire capital stock of the Southern California Sugar Co., Santa Ana, Cal., and in 1917 acquired 69% of the stock of the Santa Ana Sugar So., Santa Ana, Cal. In 1920 acquired a substantial interest in the Alameda Sugar Co. of Cal. In 1922 acquired the Grand Junction Sugar Co. with plant at Grand Junction, Cal. Owns 50% of the outstanding shares of Holly Oil Co. (see appended statement).

Production: (bags) years ended Dec. 31: 1922, 618,356; 1923, 1,046,217; 1924, 1,758,215; 1925, 1,887,322.

Management: OFFICERS: A. E. Carlton, Pres.; S. W. Sinsheimer, Vice-Pres.; Remsen McGinnis, Sec.; E. P. Shove, Treas. DIRECTORS: J. H. Post, New York, Spencer Penrose, E. P. Shove, S. W. Sinsheimer, A. E. Carlton, L. G. Carlton, Colorado Springs, Colo., C. G. Mitchell, Denver, Colo. GENERAL AUDITORS: Haskin & Sells. ANNUAL MEETING: First Wednesday in May in New York. OFFICE: Colorado Springs, Colo.

Comparative Consolidated Income Account, Years Ended Mar. 31

	1925	1924	1923	1922	1921	1919
Gross income	$1,709,563	$2,137,564	$774,028	(d) $620,703	Not stated	$792,943
Depreciation	507,406	480,699	478,119	312,037	.....	.....
Net earnings	$1,202,157	$1,656,865	$295,909	(d) $932,740	Not stated	$792,943
Interest, etc.	291,137	300,928	245,198	253,799	.....	.....
Taxes	70,000	.....	.....	.....	.....	.....
Other deductions	.....	383,667	.....	110,164	.....	.....
Balance	$841,020	$972,270	$50,711	(d) $1,296,703	$404,812	$792,943
Preferred dividends	462,000	173,250	.....	.....	231,000	276,500
Pref. sinking fund	.....	.....	.....	.....	399,492	91,046
Surplus	$379,020	$799,020	$50,711	(d) $1,296,703	(d) $225,680	$425,397
Earned per share, preferred	$25.49	$29.46	$1.54	.....	$12.27	$20.33
Earned per share, common	9.06	11.87	.....	.....	3.00	8.90

Surplus Account, year ended March 31, 1925: Surplus, March 31, 1924, $6,059,710; over-accrued for beets, 1923 crop, $105,848; refund federal taxes, year 1916-1917, $22,000; net operating profit, year ended March 31, 1925, before dividends, $841,020; total, $7,028,079. Deduct: Preferred dividends, $462,000; loss on agricultural advances, $165,382; reduction in contract values, $158,670; loss on notes and investments, $92,092; adjustment of book value, Santa Ana plant, $82,346; total, $960,490. Surplus March 31, 1925, $6,067,589.

Comparative Consolidated Balance Sheet, as of Mar. 31

ASSETS:	1925	1924	LIABILITIES:	1925	1924
Real estate, plant, etc.	$10,738,784	$10,419,470	Preferred stock	$3,300,000	$3,300,000
Securities owned	2,115,854	1,928,821	Common stock and surplus.	*6,067,589	6,059,710
Good-will, etc.	1,617,900	1,776,570	Minority stock of subs.	766,056	830,967
Cash	*898,659*	*1,115,789*	Bonded debt	3,373,500	3,715,500
Notes and accts. receivable.	*559,384*	*562,621*	*Bills payable*	*1,500,000*	.....
Agricultural, etc., advances	*544,924*	*503,679*	*Accounts payable*	*158,244*	*101,822*
Refined sugar	*2,939,288*	*1,848,870*	*Accrued accounts*	*483,853*	*805,011*
Materials and supplies	*591,270*	*544,155*	*Dividends payable*	*115,500*	*115,500*
Cattle and feed	*420,796*	*211,233*	Depreciation reserve	4,071,777	3,488,702
Deferred charges	521,206	600,220	Insurance reserve	80,452	63,129
			Contingent reserve	1,031,094	1,031,096
Total	$20,948,065	$19,511,437	Total	$20,948,065	$19,511,437

*Represented by 67,298 no par shares.

Working Capital: *1924, current assets, $4,786,356; current liabilities, $1,022,333; net current assets, $3,764,023. 1925, current assets, $5,954,321; current liabilities, $2,257,597; net current assets, $3,696,724.*

CONSOLIDATED STATEMENT OF WORKING CAPITAL, DECEMBER 31

	1926	1925	1924	1923	1922	1921
Current Assets—						
Accounts receivable	$112,672	$151,623	$183,927	$171,935	$311,027	$748,405
Inventories	2,838,681	2,689,027	2,739,710	2,620,785	4,032,274	3,501,279
Cash	1,308,957	233,473	497,735	265,883	213,502	33,832
Total	$4,260,310	$3,074,123	$3,421,372	$3,058,603	$4,556,803	$4,283,516
Current Liabilities—						
Accounts payable	$611,732	$662,232	$349,100	$458,175	$212,826	$207,105
Loans payable to bankers	.....	.....	1,338,210	2,060,537	2,812,553	3,883,615
Accrued charges	40,854	42,701	47,623	47,623	47,883	47,888
Reserve for income tax	.....	.....	.....	.....	398,159	.....
Total	$652,586	$704,933	$1,784,933	$2,566,335	$3,471,421	$4,138,608
Net Working Capital	$3,607,724	$2,369,190	$1,636,439	$492,268	$1,085,382	$144,908

Officers: J. T. Crabbs, Pres.; C. V. Jenkins, V-P., New York; W. H. Robinson, V-P., Granby, Que.; Charles Bocking, V-P. & Gen. Mgr., Anyox, B. C.; H. R. Plommer, Treas.; L. R. Thomas, Asst. Treas.; Vancouver, B. C.; Henry G. Lodge, Sec.; H. Harvey, Asst. Sec., New York.

Directors: J. T. Crabbs, J. B. Beaty, Berthold Hochschild, Edwin Thorne, E. P. Earle, Charles Hayden, C. V. Jenkins, A. Heckscher, H. G. Lodge, New York; W. H. Robinson, Granby, Que.; R. P. Butchard, Victoria, B. C.; Charles Bocking, Anyox, B. C.; D. C. Jackling, San Francisco, Cal.; N. L. Amster, Boston, Mass.

Head Office, Vancouver, B. C. Branch Office, 25 Broad St., New York.

THE R. M. HOLLINGSHEAD CO.

History and Property—Incorporated Dec. 31, 1897, in N. J. Co. manufactures and distributes 98 different chemical products, chiefly for automobile and household uses, such as soaps, body polishes, greases, radiator stop leaks, enamels, metal polishes, leather dressings, etc. Plant, located in Camden, N. J., comprises 255,000 sq. ft. of floor space and equipment includes complete chemical steam jacketed mixing vats of 200,000 gallons capacity. A large percentage of the output is filled by automatic filling machines into tin cans, all of which are made in the plant. The tin-can manufacturing equipment is capable of producing 250,000 cans per day, with tin lithographing facilities for printing the labels on the cans. Plant also includes a large modern printing department, equipment for making the wood boxes in which the finished products are packed and a well equipped machine shop in which all dies for the can-making machines are made, as well as many of the special machines used by the Company. Company maintains branches and warehouses at 62 strategic distributing points throughout the United States, Canada and Cuba.

R. M. Hollingshead Corporation—Incorporated May, 1925, in Delaware. Owns all of the outstanding Class "B" Common and approximately 95% of outstanding Class "A" Common of The R. M. Hollingshead Co. Also owns all the outstanding Common of The Frank Miller Co. of Camden, N. J. The latter distributes a line of products similar to those of The R. M. Hollingshead Co., but sells only to jobbers. Practically all Capital stock of R. M. Hollingshead Corporation is owned by officers and employees of The R. M. Hollingshead Co.

Capital Stock

Authorized 300,000 shares Class "A" and Class "B" Common, and 20,000 shares $7 dividend series Pfd.; outstanding 275,000 shares Class "A," 25,000 shares Class "B" and 13,482 shares $7 Pfd.; all Classes of no par value. Class "A" and "B" Common stocks are identical in all respects except that Class "A" is non-voting. All Class "B" Common and approximately 95% of Class "A" Common is owned by R. M. Hollingshead Corporation. Stock capitalization of Company was revised in July, 1925, and holders of old 8% non-cumulative Pfd. received in exchange, new $7 dividend Pfd. Holders of old Class "A" Common, Class "B" Common, and Founders shares received in exchange new shares of R. M. Hollingshead Corporation.

Preferred Stock Provisions—Has preference for assets and dividends and entitled in case of dissolution to $107.50 per share and dividends. The authorized amount of 20,000 shares may be further incre d to 50,000 shares, provided however, that no shares shall be issued in addition to 13,482 shares now outstanding unless (a) earnings available for dividends for 12 consecutive calendar months within the preceding 15 calendar months shall have been equal to 3 times the annual dividend requirements on Pfd. outstanding plus shares to be issued; (b) net tangible assets including proceeds of stock to be issued are equivalent to $200 per share of Pfd. outstanding and to be issued; (c) provided, further, no Pfd. in excess of 22,000 shares shall be issued except for redeeming Company's First Mortgage Bonds, unless net tangible assets including proceeds of stock to be issued (without deducting First Mortgage Bonds mentioned) shall be equal to 200% of value of Pfd. outstanding and to be issued, figured at $100 per share, plus principal amount of First Mortgage Bonds then outstanding. Consent of holders of 2-3 of Pfd. outstanding shall be required for authorization of Pfd. in excess of 50,000 shares, or for creation of any stock having priority over or equality with Pfd., or for creation or assumption of any funded debt except purchase money mortgages, unless net tangible assets amount to twice combined amount of all funded debt and Pfd. outstanding figured at $100 per share. No dividends may be paid on either class of Common except from net profits earned after Jan. 1, 1925, nor in case such dividends will reduce current assets to less than twice current liabilities, or surplus of Company to less than $21 per share of Pfd. outstanding. In case Pfd. dividends are in arrears to amount of $10.50 per share, Pfd. shall have exclusive right to elect a full minority of Board of Directors. Stock is subject to call as a whole or in part, after 3 years from its issue, on 30 days' notice, on any dividend date, at $107.50 a share and dividends.

Transfer Agent (Class "A" Common and Pfd.)—Bank of America, New York.

Registrar (Class "A" Common and Pfd.)—Chase National Bank, New York.

Original Offering—In June, 1925, blocks consisting of 1 share of Pfd. and 1 share Class "A" Common (12,000 shares each), at $100 per block, were offered by John Nickerson & Co., New York.

Annual Meeting—Third Monday in January.

Dividends—On Pfd. formerly outstanding, dividends regularly paid. On new $7 Pfd. initial dividend paid Oct. 1, 1925; payments since quarterly J, A, J & O 1. On Class "A" Common an initial dividend of 25 cents per share paid Jan. 2, 1926; similar quarterly payments April 1, and Oct. 1, 1926; none thereafter to June 1, 1927. On Class "B" initial dividend of 25 cents per share paid Jan. 2, 1926; April 1, 1926, 25 cents per share; none since to June 1, 1927. Stock dividends have been paid as follows: July 15, 1908, 500% ($135,000); Jan. 25, 1911, 50% ($87,500); Dec. 22, 1922, 500% ($1,309,500); July 15, 1924, 12% on Class "B" ($93,564); Dec. 24, 1924, 4% on Class "B" ($31,188).

Funded Debt

$872,000 First Mortgage Sinking Fund Gold 7s; Due February 1, 1938

Dated February 1, 1923.

Interest Payable February and August 1, at The Bank of America, New York.

Denominations—Coupon, $500 and $1,000; principal may be registered.

Trustees—The Bank of America, New York, and Howard B. Smith.

Provisions of Issue—Authorized and issued $1,000,000, of which $100,000 retired to Dec. 31, 1926. In addition to bonds outstanding, $28,000 were held in Treasury Dec. 31, 1926, of which $25,000 were to be cancelled by the May 1, 1927, installment of the sinking fund.

Callability—Subject to call as a whole or in part upon any interest date on 30 days' notice at 105 and interest to and including Feb. 1, 1928; at 103 and interest to and including Feb. 1, 1933; at 102 and interest to and including Feb. 1, 1937, and at 100 and interest thereafter.

Sinking Fund—Beginning May 1, 1925, the Company will pay to the Trustees semi-annually May and Nov. 1, an amount sufficient to retire the following principal amount of bonds: $25,000 from May 1, 1925, to and including Nov. 1, 1927; $30,000 from May 1, 1928, to and including Nov. 1, 1930; $35,000 from May 1, 1931, to and including Nov. 1, 1933; $40,000 from May 1, 1934, to and including Nov. 1, 1936, and $110,000 each, May 1, 1937, and Nov. 1, 1937. The funds so provided will be used to purchase bonds of this issue at a price not exceeding the then redemption price or to redeem bonds of this issue. The bonds thus acquired for the sinking fund shall be cancelled.

Security—A first lien on all fixed assets of Company in Camden, N. J., now owned or hereafter acquired, provided however, that purchase money mortgages (of not to exceed 70% of the value of the property so purchased) may be given. Mortgage provides that while these bonds are outstanding Company will not pay cash dividends which will reduce current assets to less than 135% of current liabilities, plus the amount of these bonds outstanding. No cash dividends beyond the amount of $50,000 may be paid except out of earnings subsequent to Feb. 1, 1923. The Company will maintain net tangible assets at not less than 200% of these bonds outstanding.

Tax Provisions—Company pays Normal Federal Income Tax up to 2%. Pennsylvania and Connecticut taxes, not exceeding four mills per annum, and Massachusetts State Income tax, not exceeding 6% per annum, refunded.

Legal Opinion—Beekman, Menken and Griscom, New York (for the Bankers), and James Collins Jones, Philadelphia (for the Company).

Original Offering—First publicly offered ($750,000) in March, 1923, at par and interest, by John Nickerson & Co., New York and St. Louis.

INCOME ACCOUNT, YEARS ENDED DECEMBER 31

The Frank Miller Co. Not Included

(Accounts Audited by Ernst & Ernst)

	1926	1925	1924	1923	1922	*1921
Net sales	$5,605,338	$5,802,300	$5,744,342	$4,995,943	$3,468,852	$2,411,556
Operating expenses, etc.	5,460,757	5,442,517	5,107,808	4,432,348	3,033,482	2,263,112
Net earnings	$144,581	$359,783	$636,534	$563,595	$435,370	$148,444
Other income	11,087	17,964	23,827	14,449	9,236	6,738
Total income	$155,668	$377,747	$660,361	$578,044	$444,606	$155,182
Deduct:						
Interest	$87,566	$83,549	$99,883	$72,528	$28,436	$30,323
Federal taxes	1,400	32,400	68,265	60,161	44,501	18,562
Other charges	9,347	13,138	12,103	6,740	.....	.....
Net income	$57,355	$248,660	$480,110	$438,615	$371,669	$106,297
Preferred dividends	94,374	34,102	11,856	11,856	11,856	9,859
Common dividends (cash)	218,750	36,836	66,208	62,376	20,792	20,792
Surplus for year	†$255,769	$177,722	$401,452	$364,383	$339,021	$75,646
‡Earnings Per Share—						
Preferred	$4.25	$18.44	$35.61	$32.53	$27.57	$7.88
Common	Nil	0.51	1.29	1.15	0.92	0.40

*Years ended Sept. 30. †Deficit. ‡Figured on basis of present capitalization.

GENERAL BALANCE SHEET, DECEMBER 31

(Accounts Audited by Ernst & Ernst)

Assets—	1926	1925	1924	1923	1922	*1921
Plant, property and equipment	$2,130,199	$1,726,696	$1,084,285	$1,006,186	$856,920	$399,587
Good will, trade marks, etc.	1	1	1	1	1	247,890
Investments in affiliated cos.	100,000	100,000	101,000	101,000	100,000	15,000
Advances to affiliated cos.	7,726	37,180	137,639	121,430	2,990	5,209
Cash in escrow	.....	.....	152,625	.....	.....	.....
Treasury bonds	28,000	55,000	.....	.....	.....	.....
Other assets	225,801	224,093	82,262	55,585	33,837	12,671
Cash	209,935	339,621	247,613	247,143	168,967	116,474
Accounts receivable	1,701,903	1,648,669	1,479,531	1,174,747	921,984	732,310
Inventories	1,134,616	880,273	843,092	622,675	465,501	290,033
Cash value life insurance	41,900	.....	.....	.....	.....	.....
Deferred charges	210,559	289,343	258,019	206,614	26,994	17,609
Total	$5,790,639	$5,300,876	$4,386,067	$3,535,381	$2,577,194	$1,836,783
Liabiltities—						
Common stock	$2,885,250	$2,885,250	$1,709,650	$1,577,950	$1,569,400	$259,900
Preferred stock			148,200	148,200	148,200	148,200
Funded debt	‡900,000	‡950,000	1,000,000	750,000	.....	.....
Mortgages payable	.....	.....	.....	.....	10,000	10,000
Notes and accounts payable	917,037	361,441	580,956	398,857	591,550	397,139
Accts. with affil. cos.	81,291	.....	.....	.....	.....	.....
Accrued liabilities	45,406	37,986	39,644	39,851	9,666	7,351
Reserve for Federal Taxes	1,400	32,400	68,265	58,721	44,501	18,562
Reserve for sinking fund	108,000	58,000	23,106	.....	.....	.....
Reserve for doubtful accounts	195,746	135,232	107,495	94,324	77,559	23,628
Reserve for depreciation	220,496	151,944	93,710	45,634	.....	144,699
Surplus	436,013	688,623	651,041	421,844	126,318	827,304
Total	$5,790,639	$5,300,876	$4,386,067	$3,535,381	$2,577,194	$1,836,783

*Sept. 30. ‡Includes $25,000 to be retired by sinking fund on May 1.

STATEMENT OF WORKING CAPITAL, DECEMBER 31

	1926	1925	1924	1923	1922	*1921
Current Assets—						
Cash	$209,936	$339,621	$247,613	$247,143	$168,967	$116,474
Accounts receivable (net)	1,506,157	1,513,437	1,372,036	1,080,423	844,425	708,682
Inventories	1,134,616	880,273	843,092	622,675	465,501	290,033
Cash value line ins.	41,900	.....	.....	.....	.....	.....
Total	$2,892,608	$2,733,331	$2,462,741	$1,950,241	$1,478,893	$1,115,189
Current Liabilities—						
Notes and accounts payable	$917,037	$361,441	$580,956	$398,857	$591,550	$397,139
Accrued liabilities	45,406	37,986	39,644	39,851	9,666	7,351
Reserve for Federal Taxes	1,400	32,400	68,265	58,721	44,501	18,562
Accounts with affil. cos.	81,291	.....	.....	.....	.....	.....
Total	$1,045,134	$431,827	$688,865	$497,429	$645,717	$423,052
Net Working Capital	$1,847,475	$2,301,504	$1,773,876	$1,452,812	$833,176	$692,137

*Sept. 30.

Officers and Directors: R. M. Hollingshead, Pres.; R. M. Bagley, V-P. & Sec.; C. W. Tomlinson, Treas. General Office, Camden, N. J.

THE JOHN DOUGLAS COMPANY

History and Property—Incorporated in 1890, in Ohio. Manufactures of sanitary plumbing fixtures. Has installed its fixtures in many public buildings, including the Department of Interior and the Bureau of Engravings Building at Washington, D. C., and in the Panama Canal Buildings. Company is the owner of a number of valuable patents. Plant at Cincinnati, O.

Capital Stock

Authorized, 350,000 Common and $500,000 7% cumulative Pfd.; outstanding, $350,000 Common and $298,900 Pfd.; par, $100. Common stock is all owned by interests identified with the management.

Preferred Stock Provisions—No mortgage indebtedness can be incurred nor can any other stock be issued having priority

DEFENDANT'S COUPLER IN SUIT

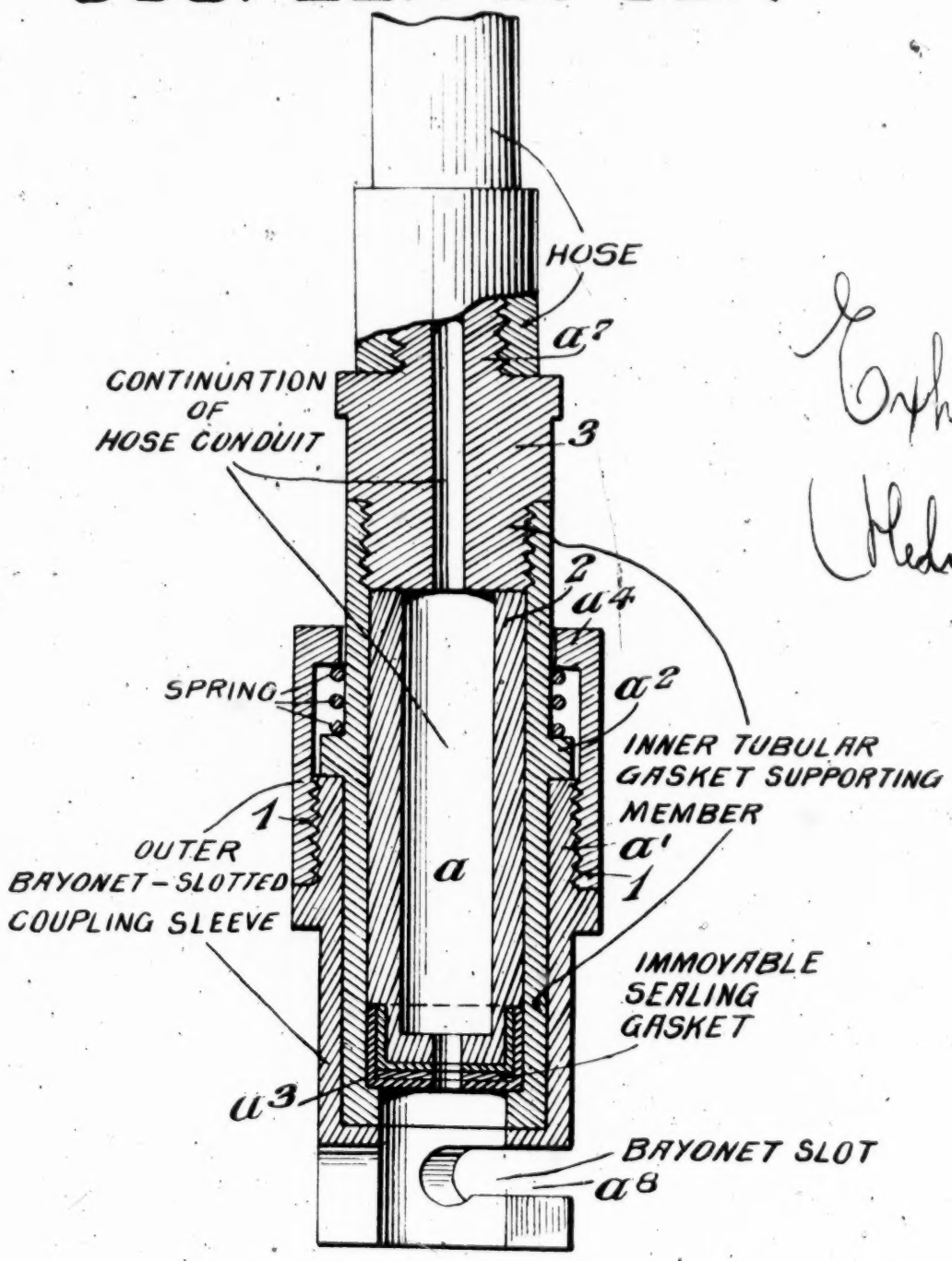
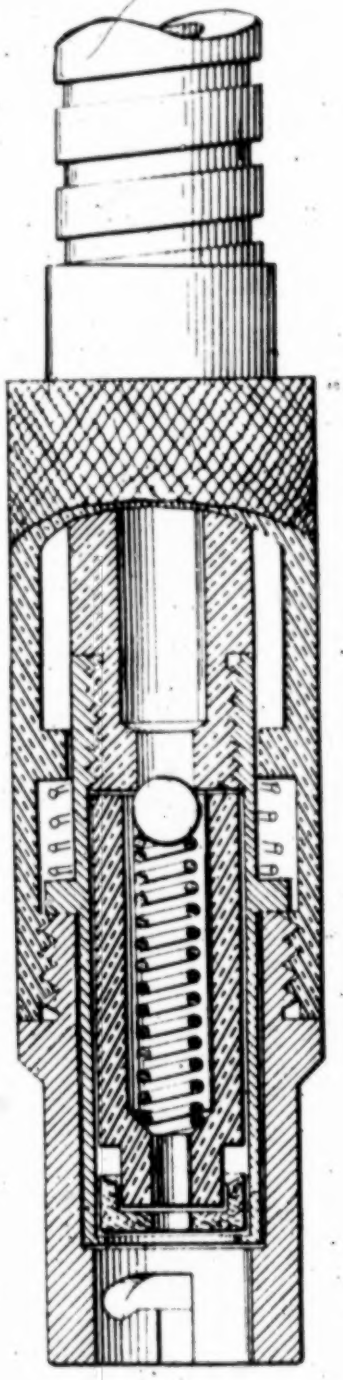


Exhibit "K"
Medong affidavit

366

Spurious Coupler



753

[fol. 367] PLAINTIFF'S EXHIBIT 4

390

Department of Commerce, United States Patent Office

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the records of this office of Disclaimer, filed August 29, 1927, in the matter of the Letters Patent of Arthur V. Gullborg, Number 1,307,734, granted June 24, 1919, for Improvement in Lubricating Means.

In testimony whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed, at the City of Washington, this thirtieth day of September in the year of our Lord, one thousand nine hundred and twenty seven and of the Independence of the United States of America the one hundred and fifty-second.

Thomas E. Robertson, Commissioner of Patents.

(Seal.) Attest: D. E. Wilson, Chief of Division.

Mail Room, Aug. 29, 1927. U. S. Patent Office. C. C. U. S. Patent Office.

DISCLAIMER

Under Section 4917 U. S. Rev. Stats.

Williams, Bradbury, McCaleb & Hinkle

To the Commissioner of Patents:

Your petitioner, The Bassick Manufacturing Company, a corporation organized and existing under and by virtue of the laws of the State of Delaware and having its principal place of business at 2650 North Crawford Avenue, [fol. 368] in Chicago, the County of Cook, and State of Illinois, represents that in the matter of a certain improvement in Lubricating Means, for which Letters patent of the United States No. 1,307,734 were granted to one Arthur V. Gullborg, on the 24th day of June, 1919, it is the assignee of the entire right, title and interest in and to said Letters

Patent and the inventions disclosed therein, as evidenced by the following assignments:

Assignment from Arthur V. Gullborg to the Alemite Die-Casting & Mfg. Co. Recorded on the 10th day of March, 1920 in Liber T 109, page 402 of Transfers of Patents.

Assignment from Alemite Die-Casting & Mfg. Co. to John S. Gullborg an undivided eighty/three hundred ninety-fifths (80/395) interest, to C. M. Hedman, an undivided seventy-five/three hundred ninety-fifths (75/395) interest, to H. R. Hedman, an undivided seventy-five/three hundred ninety-fifths (75/395) interest, to A. V. Gullborg an undivided five/three hundred ninety-fifths (5/395) interest, to F. E. Johnson an undivided ten/three hundred ninety-fifths (10/395) interest, and to D. F. Fesler an undivided one hundred fifty/three hundred ninety-fifths (150/395) interest in said patent. Recorded on the 10th day of March, 1920 in Liber T 109, page 403 of Transfers of Patents.

Assignment by John S. Gullborg an undivided eighty/three hundred ninety-fifths (80/395) interest, by C. M. Hedman an undivided seventy-five/three hundred ninety-fifths (75/395) interest, by H. R. Hedman an undivided seventy-five/three hundred ninety-fifths (75/395) interest, by A. V. Gullborg an undivided five/three hundred ninety-fifths (5/395) interest, by F. E. Johnson an undivided ten/three hundred ninety-fifths (10/395) interest, and by D. F. Fesler an undivided one hundred fifty/three hundred ninety-fifths interest in said patent to The Bassick Company. Recorded on the 10th day of March, 1920 in Liber T 109, page 406 of Transfers of Patents.

Assignment from The Bassick Company to The Bassick Manufacturing Company of the entire right, title and interest in and to said patent. Recorded on the 19th day of April, 1920 in Liber Q 110, page 55 of Transfers of Patents.

That it has reason to believe that through inadvertence, without any fraudulent or deceptive intention, the specifi- [fol. 369] cation and claim of said Letters Patent are too broad, including that of which said patentee was not the first inventor. Your petitioner, therefore, hereby enters this disclaimer to that part of the claims in said specification which is in the following words, to wit:

"12. The combination with a bearing provided with a member for receiving lubricant, of means for supplying

lubricant thereto comprising a hollow member, means for supplying lubricant to said hollow member under pressure, means for detachably connecting said members, means for sealing said connection comprising a gasket positioned between said members and held against one of said members by the pressure of the lubricant, and a spring for initially positioned said gasket against said member."

Signed at Chicago, in the County of Cook, and State of Illinois, this 26th day of August, 1927.

The Bassick Manufacturing Company, J. E. Otis, Jr., Vice President. Attest: T. T. Smerrian, Asst. Secretary.

AFFIDAVIT OF ERNEST W. DAVIS

STATE OF ILLINOIS,
County of Cook, ss:

Ernest W. Davis, being first duly sworn, deposes and says:

I am the Ernest W. Davis who signed an affidavit of even date for use in this cause, and I am familiar with the record and proceedings herein.

I have examined the lubricant compressor and equipment furnished therewith by the defendant, The R. M. Hollingshead Company, as referred to in the affidavit of D. A. Beezley, which I understand he procured on April 7, 1926.

The lubricant compressor is marked "Whiz High Pressure Chassis Lubricant The R. M. Hollingshead Co. Camden, N. J., U. S. A." This device is adapted to receive lubricant and discharge the same under pressure through [fol. 370] the flexible conduit which is adapted to be secured to a discharge pipe on the compressor. At the free end of the conduit is provided a metal hose having thereon a swivel type coupling of the type illustrated in the accompanying drawing marked "Exhibit J". The coupling is adapted to be used in conjunction with pin type fittings known as "Alemite" and made by The Bassick Manufacturing Company, the plaintiff herein, and it comprises a barrel or sleeve 101 housing a flexible cup leather 102 normally resting against an annular shoulder 103. The

barrel or sleeve 101 is flanged outwardly at its outer end to provide abutments for the ringlike members 104 and 105, member 105 being flanged inwardly at its outer end and provided with keyhole slots for the reception of the ends of a pin forming a part of a pin fitting. The inner face of the flange on member 105 is provided with a pair of grooves or depressions 106 disposed at right angles to the keyhole slots. A booster pump is disposed between the admission and discharge ends of the metal hose for the purpose of increasing the pressure on the lubricant being furnished to a bearing.

I have also examined the affidavit of O. A. Cumming and the exhibits submitted therewith, and I have had prepared and submit herewith as "Exhibit K" a drawing disclosing the construction of the compressor and Alemite type coupling sold to him. The lubricant compressor furnished to Mr. Cumming and illustrated in Fig. 1 of "Exhibit K" consists of a barrel closing at both ends by means of caps, one of which provides a bearing for a piston stem having a piston at its inner end and a handle at its outer end. The cap at the discharge end of the compressor contains a cylinder and supports a handle to operate a piston by means of which pressure may be placed upon lubricant entering the cylinder from the compressor barrel. The lubricant is forced outwardly past a check valve into the flexible conduit shown in Fig. 2, which is screwed into the cap on the discharge end of the compressor. A swivel coupling is attached to the free end of the flexible conduit and Fig. 3 is an enlarged sectional drawing of this device. It comprises a sleeve 110 having a pair of bayonet slots at its outer end for the reception of the ends of a pin forming a part of a pin fitting. The sleeve 110 rotates about an inner sleeve 111 in co-operation with a cap 112. A flexible cup leather 113 supported by means of a metallic disc and cup is slidably housed within the sleeve 111, the outward movement of the cup leather being limited by an annular shoulder 114 within the bore of the sleeve 111. A slidable piston 115 is pro-
[fols. 371 & 372] vided to operate against the cup leather 113.

While the devices sold to Messrs. Beezley and Cumming are not the product of The Bassick Manufacturing Company, they are adapted for use in conjunction with the

plaintiff's "Alemite" lubricating equipment, and the fact is also that interchangeable use is possible with the lubricating equipment referred to in my affidavit of even date as having been held to have infringed Gullborg patent 1,307,734.

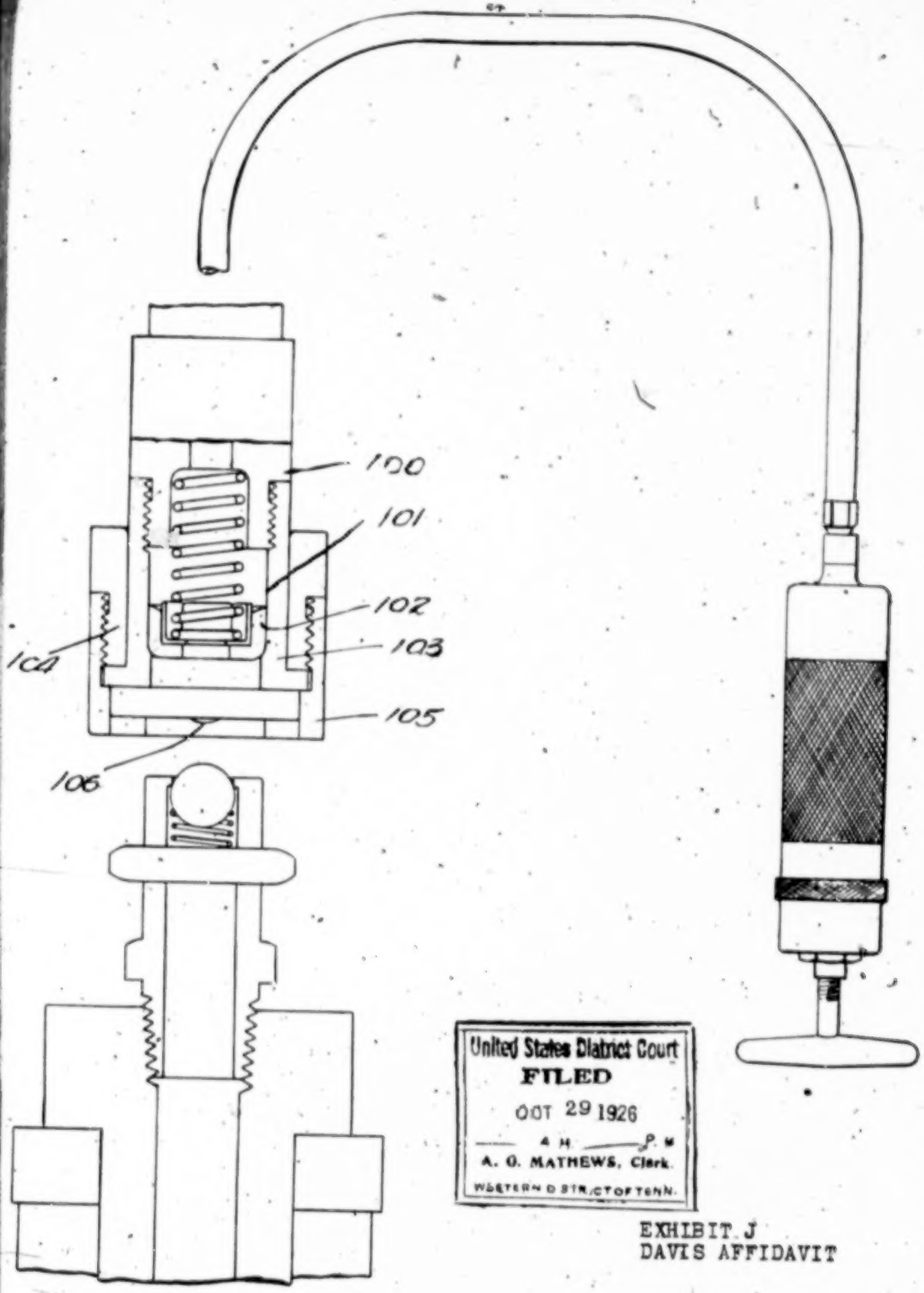
Ernest W. Davis.

Subscribed and sworn to before me this 21st day of October, 1926.

Hattie R. Schooler, Notary Public. (Seal.)

(Here follow 2 drawings, Plaintiff's Exhibit 15, side folios 373 and 374.)

PLAINTIFF'S EXHIBIT 15



United States District Court
FILED
OCT 29 1926
A. M. P. M.
A. G. MATHEWS, Clerk.
WESTERN D STR. CT OF TENN.

EXHIBIT J
DAVIS AFFIDAVIT

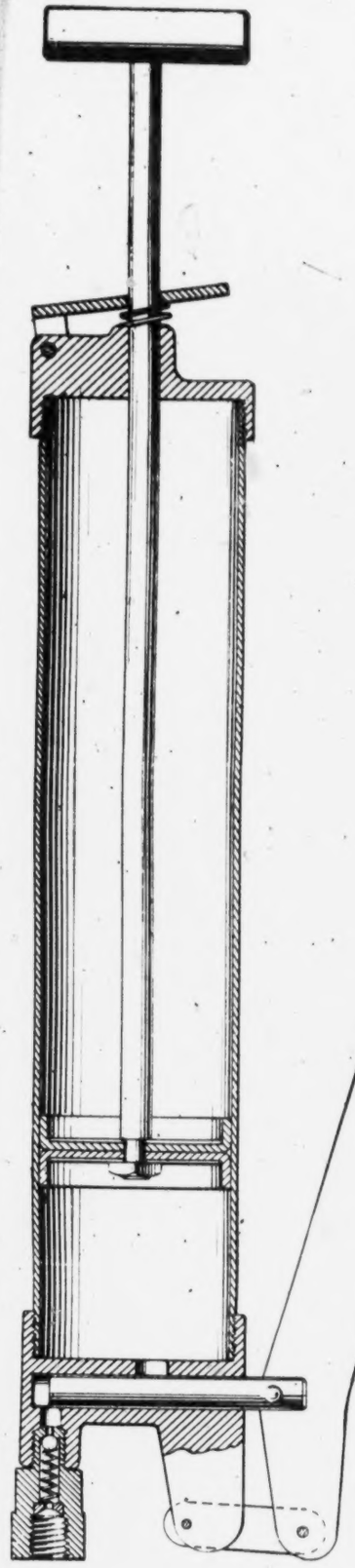


Fig. 1.

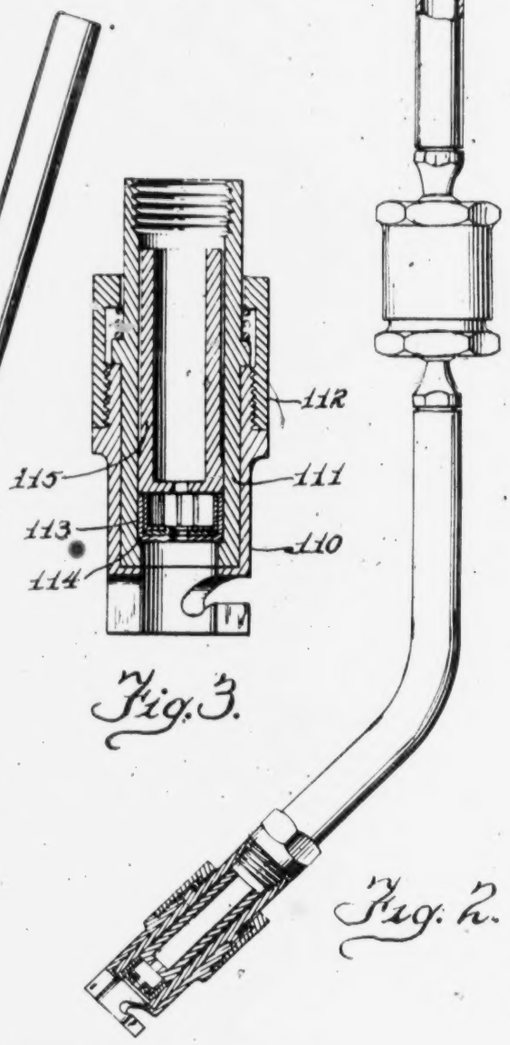


Fig. 2.

Fig. 3.

United States District Court
FILED
OCT 29 1926
A. M. P. M.
A. G. MATHEWS, Clerk.
WESTERN DISTRICT OF TENN.

PLAINTIFF'S EXHIBIT 16.

Exhibit K.
Davis Affidavit

[fol. 375] PLAINTIFF'S EXHIBIT 20

UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

Equity. No. 2759

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

NOTICE—Filed June 23, 1928

Messrs. Wiedersheim & Fairbanks, Thirteenth & Chestnut Streets, Philadelphia, Pa.

GENTLEMEN:

Please take notice that on Monday, May 21, 1928, at 10.00 o'clock A. M., or as soon thereafter as counsel can be heard, we shall appear before his Honor, Judge Joseph L. Bodine, in the court room usually occupied by him at Newark, New Jersey, and present plaintiff's Motion for the entry of an Order herein, a copy of the Motion being handed to you herewith.

Plaintiff's Motion is based upon the record and proceedings herein, and the record and proceedings in the case of The Bassick Manufacturing Company against The R. M. Hollingshead Company, Equity No. 935, in the United States District Court for the Western District of Tennessee, Western Division, in which you are also counsel for the defendant.

Williams, Bradbury, McCaleb & Hinkle, Solicitors and Counsel for Plaintiff.

Service of the foregoing notice and a copy of Plaintiff's Motion acknowledged this 12th day of May, 1928.

Leonard L. Kalish, Solicitors and Counsel for Defendant.

Certified copy.

UNITED STATES OF AMERICA,
For the District of New Jersey, ss:

I, George T. Cranmer, Clerk of the United States District Court in and for the — District of New Jersey, do

hereby certify that the annexed and foregoing is a true [fol. 376] and full copy of the original Notice now remaining among the records of the said Court in my office.

In testimony whereof I have hereunto subscribed my name and affixed the seal of the aforesaid Court at Trenton this 1st day of June, A. D. 1928.

George T. Crammer, Clerk, by Charles S. Chevrier, Deputy Clerk. (Seal.)

PLAINTIFF'S EXHIBIT 20

UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

Equity. No. 2759

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

MOTION—Filed June 23, 1928

Now comes The Bassick Manufacturing Company, by its Solicitors and Counsel, and moves for the entry of an Order explaining and supplementing the Order entered herein on February 28, 1928, by adding at the end thereof the following:

"But the Court not having decided the merits of any question in issue, this Order shall not prejudice the right of the plaintiff to prosecute its suit or claims against the R. M. Hollingshead Company."

This motion is based upon the record and proceedings herein, and the record and proceedings in the case of The Bassick Manufacturing Company against The R. M. Hollingshead Company filed on or about August 17, 1926, and pending in the United States District Court for the Western District of Tennessee, Western Division.

(Signed) Williams, Bradbury, McCaleb & Hinkle, Solicitors and Counsel for Plaintiff.

Certified copy.

[fol. 377] UNITED STATES OF AMERICA,
For the District of New Jersey, ss:

I, George T. Cranmer, Clerk of the United States District Court in and for the — District of New Jersey, do hereby certify that the annexed and foregoing is a true and full copy of the original Motion now remaining among the records of the said Court in my office.

In testimony whereof I have hereunto subscribed my name and affixed the seal of the aforesaid Court at Trenton this 29th day of May, A. D. 1928.

George T. Cranmer, Clerk, by Charles S. Chevrier, Deputy Clerk. (Seal.)

UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

Equity. No. 2759

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

On the 28th day of February, 1928, an application was made by the plaintiff to dismiss its bill of complaint in the above matter without prejudice. At the time I entered the order of dismissal I apprehended that it was the right of the plaintiff to dismiss its bill before decision, upon payment of costs. Such has been the practice of this court and the courts of the State of New Jersey for many years. Hence the order was signed.

I did not apprehend at the time the order of dismissal was signed that it might be regarded as res judicata.

I am suggesting to counsel that an appeal be taken from the order of dismissal to the end that they may bring before the Circuit Court of Appeals for the Third Circuit the circumstance that I did not think that the order could be given the effect of a determination of the cause upon the merits, but that I thought that the order was merely a dismissal which the plaintiff was entitled to at any time before the case was closed.

(Signed) J. L. Bodine, United States District Judge.

[fol. 378] I hereby — that the foregoing is a true copy of the original on file in my office.

George T. Cranmer, Clerk, per Chas. E. Joeckel, Deputy. (Seal.)

UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

Equity. No. 2759

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

The plaintiff considering itself aggrieved by the order entered herein on February 28, 1928, dismissing the bill of complaint herein, does hereby appeal to the United States Circuit Court of Appeals for the Third Circuit for the reasons specified in the assignments of error filed herewith, and prays that this appeal may be allowed and a citation may be granted directed to the above named defendant commanding it to appear before the said United States Circuit Court of Appeals to do and to receive what may appertain to justice to be done in the premises, and that a transcript duly authenticated with so much of the record, proceedings and exhibits herein as appertains to the subject matter of the appeal be transmitted with this appeal to the said United States Circuit Court of Appeals.

(Sgd.) Lynn A. Williams, Solicitor & Counsel for Plaintiff.

The foregoing appeal is allowed as prayed for and the Clerk of this Court is directed to issue a citation to the said defendant and to certify the record accordingly.

(Sgd.) J. L. Bodine, U. S. District Judge.

May 22, 1928.

I hereby certify that the foregoing is a true copy of the original on file in my office.

George T. Cranmer, Clerk, per Chas E. Joeckel, Deputy. (Seal.)

[fol. 379] UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

Equity. No. 2759

THE BASSICK MANUFACTURING COMPANY, Plaintiff,

vs.

THE FRANK MILLER COMPANY, Defendant

ASSIGNMENT OF ERRORS—Filed June 23, 1928

Now comes the above named plaintiff by its solicitor and counsel and presents with his accompanying petition for appeal from the order entered herein on February 28, 1928, dismissing the bill of complaint herein the following assignments of error:

1. The Court erred in entering the said order of dismissal on February 28, 1928.

2. The Court erred in not entering an order upon the plaintiff's motion "That the above entitled cause be dismissed without prejudice with the taxable costs to the defendant to be taxed by the court."

3. The Court erred in omitting the words "without prejudice" or words indicative of the right of the plaintiff to prosecute its suit against the R. M. Hollingshead Company in the United States District Court for the Western District of Tennessee from its order of dismissal on February 28, 1928.

If the order of February 28, 1928, be construed as a final decree upon the merits then the following are also assigned.

That the Court erred in dismissing the bill of complaint.

5. That the Court erred in not holding that the plaintiff is the owner of all the right title and interest to and under the patents in suit.

6. That the Court erred in not holding the patents in suit valid and infringed by the defendant.

7. That the Court erred in not ordering an accounting for damages, and profits as prayed for in the bill of complaint.

8. If the order of February 28, 1928, be construed as a holding that the patents in suit are invalid and/or not infringed and/or that the plaintiff is not the owner of all the right title and interests in, to and under the same, then the Court erred in so holding.

(Sgd.) Lynn A. Williams, by Henry R. Casleton, Counsel and Solicitor for Plaintiff. (Seal.)

[fol. 380] I hereby certify that the foregoing is a true copy of the original on file in my office.

George T. Cranmer, Clerk; Chas. E. Jaeckel, Deputy.

(Cover)

UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

BASSICK MANUFACTURING CO., Plaintiff,

v.

FRANK MILLER COMPANY, Defendant

On motion before Hon. Joseph L. Bodine, May 21, 1928

Marion H. Sweetman, Court Reporter, Trenton, N. J. P. O. Box 318.

UNITED STATES DISTRICT COURT, DISTRICT OF NEW JERSEY

BASSICK MANUFACTURING CO., Plaintiff,

v.

FRANK MILLER COMPANY, Defendant

On motion made before Hon. Joseph L. Bodine, at Newark. N. J., May 21, 1928, to dismiss decree entered.

Appearances:

Lynn A. Williams, Esq., Henry R. Ashton, Esq., for the Plaintff.

Charles M. Burch, Esq., E. Hayward Fairbank, Esq., Leon L. Kalish, Esq., Charles F. Lynch, Esq., William C. Jones, Esq., for the Defendant.

[fol. 381] Mr. Williams: I represent the Bassick Manufacturing Company the plaintiff in this patent infringement suit.

In this motion, the effect of which is, I believe, to correct by an explanation or a supplement an error or inadvertence in the entry of a decree of dismissal on February 28, 1928. Very briefly the facts are these: The Bassick Manufacturing Company learned in the summer of 1926 that the R. M. Hollingshead Company, through its branch in Memphis, was selling some lubricating equipment which we believe to be an infringement of the Bassick Manufacturing Company's patent covering its Alemite lubricating equipment. Suit was commenced in September, 1926, at Memphis against the Hollingshead Company, and a motion for preliminary injunction was made. Judge Anderson held the motion for preliminary injunction for several weeks until the Court of Appeals for the Sixth Circuit handed down an opinion in other suits involving the same patent. That opinion having been rendered, Judge Anderson on March 21, 1927, entered an order for a preliminary injunction restraining the Hollingshead Company. On behalf of the Bassick Company, we sent letters to some seven hundred jobbers throughout the country enclosing copies of the opinion and mandate and orders of the Sixth Circuit Court of Appeals, and advising them that their handling of equipment made by various manufacturers was, in our opinion, an infringement. One of these manufacturers complained to the court in Delaware that we were interferring improperly with their trade by the sending out of these notices.

We had not commenced suits against all of these manufacturers of what we regarded as this infringing equipment.

As soon as this one concern presented its motion to restrain us from sending out these letters, because we had not commenced suit, as we conceived it, we immediately endeavored to show our good faith by bringing suits against all of several manufacturers throughout the country who had been selling equipment in infringement of these patents. One of the concerns against whom we commenced suit at that time, in July, I think it was of 1927, was the Frank Miller Company, of Camden, whom we had been advised had been engaged in the sale of some lubricating equipment and contributory infringement of

these patents. In that suit we made a motion for a preliminary injunction, which was argued before your Honor in November of 1927, and your Honor suggested that the [fol. 382] argument take the form of final hearing, which was agreed to, with leave to both sides to file some additional affidavits, exhibits and one thing or another.

In the middle of February 1928, Mr. Bagley, vice-president of the Hollingshead Company, in conferring with Mr. Otis, vice-president and head of the Bassick Company, told Mr. Otis that the Frank Miller Company was a subsidiary of the Hollingshead Company. A few days later, on returning to my office I found a letter from Mr. Otis saying that Mr. Bagley had so advised him. Upon further investigating the matter, I concluded that the Frank Miller Company was identical to all legal intents and purposes with the Hollingshead Company. That meant that we had an injunction in the Hollingshead suit under which the Frank Miller Company was bound not to sell the lubricating equipment, which it had formerly sold.

The papers on the motion for preliminary injunction showed what did not mean as much to us at that time as it subsequently came to mean, that about the first of April 1927 the Frank Miller Company had discontinued the sale of the lubricating equipment of which we complained. Judge Anderson's injunction in the Hollingshead case was ordered on March 21st, which meant that the Miller Company had almost immediately following that injunction discontinued its sale of this equipment. When we learned that there was this identity or close privity between these parties we prepared a motion to dismiss our suit against the Frank Miller Company without prejudice, and in support of that motion Mr. Ahlberg, one of my associates, presented to your Honor the affidavits showing in more detail the facts which I have briefly stated. That motion was resisted by the Frank Miller Company, who contended that there was not an identity of parties. They contended the facts to be something like this: That the R. M. Hollingshead Company, of New Jersey, the voting stock of that company was owned by the R. M. Hollingshead Company, a Delaware corporation, and that the voting stock of the Frank Miller Company was also owned by the R. M. Hollingshead Company the Delaware corporation, and that the stock of the Delaware Hollingshead Company was in turn

owned by the officers of the R. M. Hollingshead Company, the New Jersey corporation.

Whether those be precisely the facts, and I have no reason to doubt that as set up by these people, we were satisfied that there was such identity and privity between the two. We thought that it would be a violation of the injunc- [fol. 383] tion of the court of the Western District of Tennessee to believe that the adjudication which should be had in that suit would be conclusive upon the Frank Miller Company as well as the Hollingshead Company, because of what we conceived to be this identity between them. At the hearing of our motion to dismiss the suit against the Miller Company, there were representations made on behalf of counsel for that defendant, who are the same counsel as for the Hollingshead Company in Tennessee, that the Frank Miller Company had spent much money and effort in preparing for the trial of the Frank Miller suit.

Your Honor on February 28th, when this matter was heard, entered an order of dismissal, from which was struck out these two words "without prejudice." The Hollingshead case in Tennessee was set for trial at final hearing before Judge Anderson on April 25th. I went to Memphis the previous day and there learned that two or three days prior thereto motion had been made to Judge Anderson for leave on the part of the Hollingshead Company to file an amendment to its answer, and that amendment recited or alleged that there was res judicata or an estoppel by judgment resulting from the order which had been entered in this case, on February 28th. That answer says in part:

"Defendant further answering avers as a separate and distinct defense that the matters and things complained of herein are now res judicata by reason of the final decree entered by his Honor Joseph L. Bodine on February 28th, 1928, in a case entitled 'The United States District Court, District of New Jersey, Bassick Manufacturing Company v. The Frank Miller Company, Equity No. 2759.'

"a. Wherein as shown by the Bill of Complaint, which is a substantial duplicate of the bill of complaint herein, the cause of action is identical with the cause of action herein, to wit—as shown by the record.

"(b) Wherein as shown by the record, particularly the affidavits of J. E. Otis, Jr. and Elwood Hansmann, on behalf of plaintiff"—those were the parties who made affidavits in support of our motion here—"the issues of infringment involved are the same as the issues of infringement herein.

"(c) Wherein the plaintiff has shown by its record particularly the affidavit of J. E. Otis, Jr., filed on behalf of plaintiff, that the plaintiff is identically the same as the plaintiff herein and that the defendant, the Frank Miller Company, is in privity with the defendant—the Hollingshead Company herein.

[fol. 384] "(c) Wherein the quality of the parties litigant is identical with the qualities of the parties litigant herein, and

"(d) Wherein the pleadings and proofs are the same as the pleadings and proofs herein.

"Defendant further answering avers that in the above entitled cause, the Bassick Manufacturing Company v. Frank Miller Company, Judge Bodine expressly denied plaintiff a decree of dismissal qualified by the terms 'without prejudice' and ordered said words 'without prejudice' stricken from the decree, so that said decree of dismissal in said Frank Miller suit, as finally entered by the District of New Jersey read as follows:

'This cause having come on to be heard before the court upon plaintiff's motion to dismiss, the same having been argued by counsel, and the court being fully advised in the premises, it is Ordered that the above entitled cause be dismissed [without prejudice]* with the taxable costs to the defendant, to be taxed by the clerk.

J. L. Bodine, U. S. District Judge.'

"The said decree of dismissal is a final decree on the merits and conclusive as to matters specifically disposed of thereby, and also of all other matters which might have been disposed of in said suit at plaintiff's option."

When the case in Tennessee was called for trial, there was an opening statement and motion to segregate this is-

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[* Words enclosed in brackets erased in copy.]

sue of res adjudicata and Mr. Burch on behalf of the defendant made the opening argument in which he argued that there was this res judicata. He made an effective argument. I am frank to concede there was force in it. That court did not there decide the issue, but adjourned the trial to be continued today. Eight days ago we served upon counsel for the Miller Company, the counsel for the Hollingshead Company there being the same, our motion for order explaining and supplementing the decree of February 28th by the addition of the following words:

"That the court not having decided the merits of any question in issue this order shall not prejudice the right of plaintiff to prosecute its suit or claims against the R. M. Hollingshead Company."

The reason for this motion for this correction of this error, or inadvertence, in the order of February 28th is because I understood it to have been the statement of the court, and the understanding at least of the plaintiff's [fol. 385] representatives at that time, that that was not a decision upon the merits and was not infringement between these parties.

I have here an excerpt from the United States Supreme Court case in re Skinner, 265 U. S., which I think is conclusive authority to the effect that the plaintiff had an absolute right to discontinue the Frank Miller suit voluntarily, or to have it dismissed on its own motion as was done, providing the case had not reached the stage or was not of such a character that the defendant had a right to affirmative relief upon some counterclaim or cross bill for example.

The Court: All that remained to be done in this case was for me to receive the briefs.

Mr. Williams: That is true.

The Court: That plaintiff's case was in and the defendant's case was in.

Mr. Williams: I am willing to concede that is the situation. It is true that there were some exhibits also to be filed by the defendant.

The Court: Now, as between the parties to that litigation, the parties before the court, don't you think that a

final decree ought to be a final decree as to the parties to that litigation?

Mr. Williams: I think it should conclude us against any further suit against the Frank Miller Company, yes, except if that is intended to mean that we cannot pursue our suit which had been first started against the Hollingshead Company, and wherein we had an injunction, I do not think it should conclude that suit. It seems to me that we should have had in fairness and reason the right to elect, if we so desire, whether to prosecute the Hollingshead suit and let the adjudication of that suit determine whether or not its subsidiary, the Frank Miller Company, could operate. If there should be an injunction in the Hollingshead suit and if there is the privity or identity which we allege, and which the defendant now urges in Tennessee, I should say that an adjudication in the Hollingshead suit granting an injunction and holding the patent valid and infringed could be enforced by that court against sales made by the subsidiary, the Frank Miller Company. But I think that since we were satisfied with the remedy which could be exercised, the relief which could be granted in that suit, and since the defendant had gone to expenses in [fol. 386] this suit—although as a matter of fact the identical evidence that they offered here, the exhibits which they offered here have all been offered there; the counsel who were here were the counsel originally there, and while it was alleged here that large expenses had been incurred in preparing the defense of the Frank Miller case here, I think very likely as a matter of fact that it was the same identical expense that was incurred once and for all in both cases, for I do not think there was any substantial duplication or additional expense because of the additional suit.

However, that may be I do think that since we were willing to rely upon the relief which could be had there we should not be permitted later to come back into this court and endeavor again to assert our rights which we have once asserted and which we had once made the basis of our motion to dismiss. I mean by that to make a full and responsive answer to your Honor's question. If I have not done so, I would be glad to endeavor to answer another.

The Court: What was in my mind was this: This New Jersey defendant—what was their name? Mr. Williams: The Frank Miller Company.

The Court: Don't you think that was a final determination as to the Frank Miller Company?

Mr. Williams: Final in the sense of a voluntary motion to discontinue or dismiss, yes. I do not think it was intended to estop us or bar us from the prosecution of the Hollingshead suit, which had already been started and in which there was at the time an injunction. I do not think that the order entered here was intended to work the vacation for the order of injunction there. Now, if it was final in every conceivable sense that would have been the sense of it. If it were a decision upon the merits, under the authorities, I would say that it required the court there to vacate the injunction and simply dismiss the suit there upon the ground that the suit here had been dismissed. Now, that is upon the assumption that it was final in every conceivable sense and I think that it was not the intention that it should be. I think that the matter can be in a measure tested by considering what may happened in the——

The Court: May I interrupt you just a second. Suppose that case instead of being discontinued had been decided by me and I had dismissed the bill of complaint, what [fol. 387] would the effect of that dismissal have been as regards the Hollingshead Company?

Mr. Williams: If there is the identity of parties which we claim, and the identity of cause of action, which there is as we contend—that is everything that was here was involved there, unless there was something more involved there than was involved here, but answering the question only in so far as the identity of claims of the parties were concerned, assuming that they were fully identical, then I should say if there had been here a decision upon the merits which took the form of an order of dismissal that would constitute a res judicata and an estoppel by judgment which could be treated there, and which would have necessitated an order of dismissal in that suit upon that ground. And then the practical result would be that because that was done here, without prejudice as I understood, and I think as the court said several times during

the argument, there would then be dismissal of final form and character in both the suits and with no adjudication of the merits of the questions of validity or infringement in either suit, except as the naked order of dismissal may imply or impute the assumption or the presumption that it was a decision on the merits of the case. And that I think was not had and would not then be had in either court.

The Court: Not wishing to unnecessarily annoy you, would you tell me what form you wish that final order to take?

Mr. Williams: I wish that final order to take the form which it originally had, and which was as follows: "That the above entitled cause be dismissed, with the taxable costs to the defendant to be taxed by the clerk, but the court not having decided the merits of any question in issue this order shall not prejudice the right of the plaintiff to prosecute its suit or claims against the R. M. Hollingshead Company."

The Court: Now let me hear your adversary. I am not closing you entirely. I would just like to hear what they had to say.

Mr. Lynch: May I present Judge Burch, of Tennessee?

Mr. Burch: May it please the court, I am the party that my adversary, Mr. Williams referred to a moment ago as [fol. 388] having made an efficient argument, and at the outset I want to thank him for that very grateful tribute.

I have been in the Tennessee case only a short time, and as I argued before the District Judge in Tennessee this question of res judicata I was asked by counsel in Philadelphia to present the matter to your Honor, and in order not to wear out my welcome in this court, where I hope I may come again, I will present my points just as briefly as possible.

First, may it please the court I would like to ask a question, because I am in a jurisdiction with which I am not familiar, as to whether or not this is the January Term of the Trenton court, or whether it is some subsequent term.

The Court: This is the April Term.

Mr. Burch: Then may it please the court, I submit this suggestion——

The Court: That we have no power to change, alter or effect our decrees when the term is passed.

Mr. Burch: Yes, that is point number 1.

The Court: I am familiar with the cases upon that point.

Mr. Burch: That is my point number 1. It is an elementary principle of law. I need not cite authorities on it. But if it were the same term, then I am quite prepared to meet the argument of the learned counsel on the other side, assuming that it was the same term. Here is an order of dismissal that has been entered at the instance of the complainant, the same complainant—I am using a legal term that we have in our Tennessee Chancery practice——

The Court: If you will just excuse me a second. This order as presented to me had the words "without prejudice" in it. I did not like those words "without prejudice" because it seemed to me that if this New Jersey corporation were again sued here in this district that they were imposing a tremendous burden upon that New Jersey defendant. Now, I am of the notion that those words were stricken out with the idea that that would prevent a similar suit being brought against this New Jersey corporation.

[fol. 389] Mr. Burch: I quite concur. That is the construction which I placed upon it as soon as I saw the decree and learned of the circumstances under which it was entered.

Now, as I understand, and your Honor will correct me if I am mistaken in any facts as I want to be absolutely fair and frank, my understanding is that this suit against the Frank Miller Company, a suit in equity, had progressed to a certain stage, that the proofs were in, the plaintiff had presented its proof and the defendant had presented its proof and counsel had appeared at the bar of the court and the case had been fully argued at the bar of the court on November 29th, as I understand from counsel, and the case had gone to that stage that the record was ready for decision. Everything was in the record that it was necessary for the court to have in order to decide the case. The only thing that has been suggested that might possibly be lacking was some briefs and, of course, as well all know as lawyers a brief is merely a reminder of what has

been stated in oral argument, and a citation of authorities.

The Court: I am of the opinion there was no oral argument. I think briefs were to be submitted and then there was to be an oral argument after the briefs had been submitted and exchanged, so that the oral argument would take a very short form. So that there was quite a good deal more to be done in the case.

Mr. Burch: Yes.

The Court: At the most, the testimony was in. Now, I am right in that I think.

Mr. Lynch: I think that the oral argument took place, may it please the court.

Mr. Williams: There was an oral argument upon a motion for preliminary injunction upon certain affidavits which had been filed on both sides, and then when your Honor suggested that we let the matter go to final hearing it was agreed and allowed that both parties might file additional affidavits and additional affidavits were filed on our side, and as I recall additional affidavits were filed by the defendant. If I am wrong as to the affidavits—because Mr. Kalish shakes his head—I know I got numerous letters from him asking if we would stipulate this, that and the other, which we did in a large measure, and there still remained his exhibits to be filed.

[fol. 390] Now, the record put before the court before the briefs were to be filed comprises four or five times as much matter as in the record when the motion for preliminary injunction was argued, and I dare say your Honor never looked at any of that evidence——

The Court: You are quite right in saying that I did not look at it. Now, let me intruce a second more. If this decision of mine dismissing this bill is such a final decision as amounts to res judicata as against the Hollingshead people, then it would seem to me that the plaintiff had euchred himself out of his day in court.

In other words, he comes in with a decree which the court has not ordered, as says: "I want to dismiss. I want to discontinue." And I say, "You want to discontinue against whom?" and he says, "The Frank Miller Company." I say, "Do you think the Frank Miller Company ought to be subjected to another suit in this jurisdiction about this cause? This is a busy court. We have now

spent several days on this matter. Are you coming in again against the Frank Miller Company?" and he says "No, I am not." And then I say, "Well, then, let us strike out these words 'without prejudice' so this will be final here in this court as to Miller," but if it is final against Hollingshead then it would seem to me that he has entered a decree from which he cannot appeal.

He cannot ever get a final adjudication as against Hollingshead, and if he discontinued against Miller whom he regards as a smaller infringer he is out of luck. He has lost his rights. Now, that is the big problem.

Mr. Burch: I appreciate very much your Honor's statement of the proposition, and I shall address myself to it. As counsel has properly stated in February, three or four weeks before the argument on February 28th, the plaintiff, the Bassick Manufacturing Company, states they learned that the Miller Company was a subsidiary of the Hollingshead Company. In other words, several weeks before the offer to dismiss was made the plaintiff had knowledge of the privity of relationship between the Hollingshead Company and the Miller Company. The plaintiff, therefore, knew several weeks before February 28th that it had a suit in the United States District Court for Tennessee and a suit in the United States District Court at [fol. 391] Trenton with the same plaintiff and the same defendant. I say "same defendant" because while the name in New Jersey was Frank Miller and the name in Tennessee was Hollingshead, the plaintiff knew that Hollingshead and Miller was one and the same; that they were inter-related corporations and there is no conflict in the affidavit filed before your Honor on February 28th as to the privity of relationship—as to the fact. There is a little controversy as to the nature of the corporation——

The Court: But assuming that was so, why should I be annoyed because they took their litigation down to Tennessee with them?

Mr. Burch: I do not think your Honor should.

The Court: But what is back of my earlier question is this: If this decision of mine is res judicata against Hollingshead, then the plaintiff in the New Jersey action, by discontinuing, has done himself a worse service than if I had decided the case against him. Because if I had decided the case against him there were fifteen chances

out of one hundred to have my decision reversed in the Circuit Court of Appeals. If, however, the Circuit Court of Appeals did not reverse me, he would have then had a conflict of decisions in the Circuit Court of the United States and he could have certioraried up to the Supreme Court; Now, if your argument is right that by entering that order of discontinuance against Miller he put himself out of court, he put himself entirely out of court, because he did himself more injury than if he lost his cause, not only in the District Court but also in the Circuit Court of Appeals. It was tantamount with the decision in the Sixth Circuit that say-, "I am all wrong, the courts who have decided in my favor are all wrong, and I have to run for cover." And in running for cover he got nothing.

Mr. Burch: Your Honor understands that this matter of res judicata has not been decided by the United States District Judge at Memphis. We have filed a supplemental amendment to the answer setting up this defense of res judicata. Mr. Williams, on the other hand, in the Memphis court denies that it is a case of res judicata, and we have argued the question in that court before Judge Anderson and expect to argue it further. We insist that the decision did have the effect of res judicata, and he makes an able argument in favor of his position.

The place to determine whether or not a matter is res [fol. 392] judicata is the court in which the defense is filed. It is an undetermined situation in Memphis, we insisting that it is res judicata and Mr. Williams insisting that it is not.

Now, to pursue my argument a little further, if I may do so——

The Court: I do not conceive that when Mr. Williams entered that order that he had any comprehension that that order would be given such an effect, because as I tried to point out that if he did, then by presenting that order he was abandoning a perfectly clear legal position, so far as the Sixth Circuit was concerned, and forever closing the door to his client to assert as they could, but for that order, even if they had an adverse decision, that they were still entitled to a basic patent.

Mr. Burch: Only so far as Miller and Hollingshead were concerned, not as to other defendants who were claimed to have infringed.

The Court: Hollingshead is pricipally occupied in Memphis, Tennessee, is he?

Mr. Burch: No. in Camden, N. J. That is the place of the factory and plant of the Hollingshead Company. The Memphis place is a very small subsidiary of the main office and main plant in Camden, N. J.

Now, if I may pursue this a little further, may it please the court, and I know that your Honor wants to get at the equity of this situation and that, of course, is always what a court of equity desires to do. Two or three weeks before February 28th, when the motion for dismissal was made, the plaintiff in this case, the Bassick Manufacturing Company, knew that it had a suit in Memphis and knew that it had a suit in Trenton about the same matter and against the same inter-related parties. In other words, it had two suits, one in one jurisdiction and one in another jurisdiction about the same subject matter and between the same parties, if my contention about privity is correct, and that seems to be conceded. The law permits that. The law permits the plaintiff to sue the same defendant in this jurisdiction and also in another jurisdiction, but from the beginning of time the law has said to a party who brings two suits instead of one—"You can do that if you want to, but you must remember you are playing with dynamite, [fol. 393] and when there is an explosion in one place that explosion will be felt in another."

Now, when the parties came before your Honor on February 28th, as I understand, of course, your Honor will correct me if I am wrong, it was represented to your Honor not only that the plaintiff knew about this suit in Tennessee, but that the reason the plaintiff wanted to discontinue the suit in New Jersey was that it had a similar between the same parties in Tennessee and had already obtained a preliminary or interlocutory injunction in Tennessee. The situation on February 28th was not one brought about by the defendant. The defendant did not invite this dismissal, but opposed it, as I understand it, and objected to the dismissal. It is not a situation where a defendant has entrapped or ensnared a plaintiff into entering a decree. Here is a decree which the plaintiff comes in, of his own motion, and says "I want this decree and I want it without prejudice," and then there comes the usual argument that takes place, the defendant objecting to that kind of decree and

finally the matter being decided by your Honor, who directed, as I am told, that the words "without prejudice" be stricken out.

When your Honor made that decision at Trenton, the plaintiff could have said "I had rather not have a dismissal at all if the words 'without prejudice' are to be stricken out. I will let the case go on for decision." The record was complete. Everything could have been done. All that he need to have said at that time, and he can still say it if he wants to, "I except to that decree."

The Court: But under our New Jersey equity practice he does not except to any decree.

Mr. Burch: But he could have said in effect: "Your Honor I wanted a decree without prejudice. Your Honor has stricken out the words "without prejudice," and I will take that case to the Circuit Court of Appeals for the Third Circuit in order to determine whether or not your Honor was right in striking out the words "without prejudice," when I made my motion to dismiss at the then stage of the proceedings."

Now, of course, he can still take that appeal if he wants to. This decree was entered on March 21st instead of February 28th. I do not know what the discrepancy is as to the dates.

Mr. Williams: I had hoped it was entered on February 28th.

[fol. 394] Mr. Burch: It is immaterial at any event. A plaintiff cannot play fast and loose with the court. I am not meaning to reflect on the learned counsel for the plaintiff——

The Court: No, I do not think that Mr. Williams wants to play fast and loose with the court, but I think that what really happened in this case—maybe I ought not to say that—but I think that what he wanted was an adjudication in the other case. In other words, I suppose the jurisdiction of the District Courts are co-ordinate and he preferred to have a judgment in the Hollingshead case to a judgment in the Miller case. In other words, he preferred to have Hollingshead, a party defendant to that suit, enjoined. And it may have been that being an astute man he formed some judgment as to what my decision was likely to be, but as I tried to point out to him it would not make any difference to him what my decision was anyhow, because he would have gone right on up with it. In other words, he had two

other courts open to him to which he could go. Now, if your contention be right that the dismissal is res judicata, not only in the Miller suit but in the Hollingshead suit, then he has put his head in a noose and hung himself.

I do not believe that the law is in such position that astute counsel hangs himself that way, and I think that you will agree with me that Mr. Williams is astute counsel, and I do not think, if you will pardon my saying so, that in this state of the law when, at least, for 75 or 100 years a struggle has been made to get decisions on the merits that we ought to go back to the old books to Colt, and Middleton and the other early writers; to see whether Mr. Williams has lost his day in court.

Mr. Burch: I quite agree with all your Honor has said, and I would not go back to Colt and Middleton, but exactly to the same decision Mr. Williams referred to in 265 United States In re Skinner and Eddy Corporation.

The Court: I do not quite understand that.

Mr. Burch: It sounds certainly bombastic and conceited if I said I did understand it, but I will at least give you my conception of what that case is. It is always helpful in reading a decision to first acquaint yourself with the facts upon which that decision was based. Now, the Skinner & Eddy [fol. 395] Corporation case was this: They had a claim against the government of the United States and filed the claim in the United States Court of Claims. The proper department of the Government filed an answer to that claim. The Skinner & Eddy Corporation thereupon concluded, for reasons best known to itself, that it did not want to prosecute its suit in the Court of Claims, but in the United States District Court in one of the far western states, so it went before the Court of Claims and asked for leave to dismiss without prejudice. As soon as it asked to dismiss without prejudice, I believe that the government asked leave to file a cross bill, but the motion to dismiss without prejudice was granted first. That case went to the United States Supreme Court on that state of facts, where no proofs had been taken and nothing but pleadings filed and claim and answer, and the question was whether under those conditions the plaintiff had a right to dismiss his suit without prejudice. Chief Justice Taft, however, was very careful to word his opinion. Now he begins: "It is ordinarily" (not always) "the undisputed right of a plaintiff to dismiss a bill in equity" (when)—"before final hearing." Now, I call

your Honor's attention to the qualifying language, "It is ordinarily"—not always—"before final hearing" that he has the right, but he never has a right after final hearing.

Now, I think I can show to your Honor by decision of the Federal Court that final hearing means when the case has reached that stage that a decision can be rendered upon the pleadings and the proof. Certainly, my learned friend cannot contend ——

The Court: Just a second. What we New Jersey lawyers speak of as final hearing is analogous to this situation: The Judge is on the bench and the jurors are in the box. The plaintiff has put in his proof and the defendant has put in his proof. Counsel have not started to sum up and the Judge has not delivered his charge. Plaintiff's counsel can in that situation, and sometimes does, move for a voluntary non suit. We must grant it.

Mr. Burch: We have exactly the same practice, but that is by virtue of statute.

The Court: The books on the thing go back to the early times of the state.

[fol. 396] Mr. Burch: In my memorandum which I have prepared ——

The Court (continuing): Now, I could not prevent in that situation plaintiff's counsel starting over against this same defendant. In fact, he often does it. My notion was—here is Miller. He has come into court and put up his money on this thing defending this suit. They have taken several days of our time with this patent. Now, if they do not want our decision let them discontinue, but I do not want to see them here again. So in sort of an arbitrary way, I took my pencil and struck out the words "without prejudice." Now, I do not think that ought to be an estoppel by record or a case of res judicata in another court, for what you say is so—the term has gone by, but the Appellate courts are open. But I do not think it ought to be urged as a matter of res judicata in another court.

Mr. Burch: Of course, we do not know until after Judge Anderson passes on it that the defense of res judicata is good or bad, because he has indicated no view of it at all up to the present time. Now, in my investigation of this question, your Honor, I have confined myself entirely to the federal authorities, decisions of the Supreme Court of the United States and the Circuit Court of Appeals for the reason that as I understood the practice on the equity side

of the federal court is the practice of the High Chancellor of England as it existed up to 1842, with such amendments as has been made in the Supreme Court of the United States in decisions and rules promulgated since that time, and I do not feel that decisions in equity cases in regard to dismissal without prejudice would have had any particular value here inasmuch as it is a question to be decided according to the law as administered on the equity side of the federal court, so I have confined myself to the equity decisions, and it seems to me plain, may it please the court, and I say this with great deference, your Honor, that this case having reached the stage to which it had gone before your Honor when the motion to dismiss was made, it would have been error to have dismissed the suit without prejudice.

Now, if it had been a situation, as I say, where the defendant had in some way induced the plaintiff to take a course of this kind, where the defendant had been guilty of any bad faith, that is a different proposition. But this is the plaintiff's own course, guided by learned and astute counsel [fol. 397] as your Honor has most properly said, knowing the law and learned in the law.

The plaintiff comes into court and asks your Honor to allow him to dismiss this suit. Can counsel come in now and say "I had not studied the authorities then as much as I have studied them since?"

The Court: May I see the best authority you have?

Mr. Burch: Yes, this case of 265 U. S. holds that the dismissal may be before the final hearing. Now, I am going to read your Honor some authorities on what is final hearing. I have a great number of federal cases here. The next case on this subject is a very noted case in the law, the case of Pullman Palace Car Company v. Central Transportation Co., 171 U. S. 139. This was in the days when the pullman or sleeping car transportation was divided between the Pullman Company in the west and the Central Transportation Company in the east, and the Pullman Company entered into a contract for the lease or purchase of the Central Transportation Company.

I happen to remember Mr. Choate was one of the counsel of the case. The Central Company sued the Pullman Company on this contract and these suits were in progress. Finally, the Pullman Company became tired of all this

litigation and it filed a suit against the Central Transportation Company from bringing any more suits against it and, of course, having gone into a court of equity it was necessary for the Pullman Company to do equity, and they said "If this is a valid contract we will pay according to the contract, or if not, on a quantum meruit basis. This bill was answered by the Central Transportation Company, and then the Pullman Company asked leave to dismiss its bill. The court denied the right to dismiss the bill. The case went to the Supreme Court of the United States and the Supreme Court said: "No, you have no right to dismiss this bill. You brought these people into court. You set up in your bill here that you are willing to pay them what is due them and they filed an answer saying that they want what is due them. They accepted this tender. They are entitled to get what is coming to them. They are entitled to affirmative relief.

The Court: Was not there in New York a decision by Judge Learned Hand with respect to patent cases where the question was validity and infringement, and a dismissal before decision?

[fol. 398] Mr. Burch: I think I have the decision your Honor refers to. I have several patent cases here in which it is held that where plaintiff brings suit for an infringement of a patent on account of the defendant selling or using some device that he claim infringes that patent, and the defendant files an answer, although he does not designate his answer as a cross bill and does not ask for any affirmative relief in his answer—not knowing patent law—he is entitled to affirmative relief as and whether his particular device is an infringement of the plaintiff's device. That is just this case.

The Court: But what do those cases hold, because I can see a line of distinction between this Pullman case and these patent cases.

Mr. Burch: I will read that to your Honor. I am reading now a quotation from Judge Taft's opinion—then a Circuit Judge—in the case of City of Detroit v. Detroit City Railway, 55 Fed. 565, in which he is discussing the general rule as to the right of the plaintiff to dismiss without prejudice. "In Electrical Accumulator Co. v. Brush Electric Co. 44 Fed. Rep. 603, Mr. Justice Brown held that where, under an answer, and by virtue of the statute controlling

patent litigation, a defendant was given a right, in the nature of affirmative relief, to have the patent sued on declared void, and the case had been pending three years, the defendant was entitled to have the original bill heard in spite of a motion to dismiss. In Manufacturing Co. v. Waring, 46 Fed. Rep. 87, Judge Lacombe held that a complainant was not entitled or right to dismiss his bill after the answer is filed, setting up that the license to use a patent upon which the suit is brought is fraudulent and void; and showing that defendant is entitled to a decree for its cancellation."

No, I call your Honor's attention to the position of the defendant in this case. They cannot sell this lubricating device and this coupling device. The decree in the Memphis case binds the Miller Company and the Hollingshead Company. Now, here is a case in New Jersey, in the home of these people. It has come before your Honor and it is ripe for decision and the decision is at hand. What that was going to be, I do not know. That was for your Honor's determination. Now, can the Bassick Company in that case, for reasons best known to itself, after the proof is all in, come into court and say "I dismiss without prejudice." If he can do that the next day he can bring another suit [fol. 399] and carry the Miller Company through a long string of litigation and never give an injunction bond, but hold this litigation over the head of this defendant so that it could not do business anywhere in this country. Now, if that could be done there would be similar successive suits until the right of the plaintiff's business had been exhausted.

The Court: Where is that case in the Second Circuit on voluntary dismissals?

Mr. Burch: Judge Lacombe of the Second Circuit. I think that he was the New York Judge. I find in this decision in the case of Hat-Sweat Manufacturing Co. v. Waring, 46 Fed. 147—I am quoting from the head note: "A complainant is not entitled as of right to dismiss his bill after the answer is filed, setting up that the license to use a patent upon which the suit is brought is fraudulent and void, and showing that defendant is entitled to a decree for its cancellation."

Now, hastening along, may it please the court, I find a very full review of all the federal decisions in the decision by

Judge Brown in the District of Rhode Island in 232 Federal 784 in the case of Young v. Samuels. I will give your Honor a copy of this memorandum and, of course, will be glad to furnish the authorities to Mr. Williams. In that case Judge Brown, of Rhode Island, discusses a conflict of authority between the First and Second Circuits as to the right to dismiss without prejudice, and in the course of this opinion he says:

"It may be questioned, however, whether the broad statement of the right of a plaintiff to discontinue, even after the proofs are closed and all the material is ready for a judgment on the merits, can be justified on principle. So broad a right to discontinue may enable a plaintiff to avoid a decision against him, when he has found that, upon the proofs taken and completed as required by the rules of court, a decision against him upon the merits is inevitable if the case proceeds. This, it seems to me, may work a substantial prejudice to a defendant, and amount to a substantial deprivation of his right to end the matter in the tribunal before which the plaintiff has brought him.

"This is something more than subjecting him to the annoyance of subsequent litigation; it is a deprivation of his right to the fruits of the labor and expense which he has al- [fol. 400] ready been to in following the course prescribed by law and by the rules of court. In many cases this involves a very great expenditure of time and money, and any rule which ignores this seems unjust to a defendant."

Now, quoting from some opinion, he adverts to one of the Justices of the Supreme Court of the United States, when they had time to go on the circuit. He says:

"In Folger v. Robert G. Shaw Co., Fed. Cas. No. 4,899, a case in the First Circuit which deserves careful consideration, Justice Woodbury said:

" 'I have assumed as the guilding principle, it being the only one conceivable by me, that the precise stage in which the discontinuance should be allowed without a judgment on the merits, and as a matter of right if claimed by the prosecuting party, is any progress in the cause which has not yet furnished means to the court for a correct final decision * * *

"'Each party should have somewhat similar rights in respect to such a subject; and the great inquiry is: When the plaintiff must be compelled to stop to exercise this power, as another action? This is the precise question here: When that stage must be considered as reached? The rules of practice do not seem to be entirely uniform on this point, and have become more rigid in modern times than anciently. But I apprehend that the principle which must govern it is that before indicated, and which is that this act must be done at some period before the merits can be ascertained for a final judgment, or the plaintiff is not entitled to do it as a right. * * *

"'Now it does not seem to me to be consistent with principle that a case, standing here with pleadings completed, evidence taken, and all things ready for argument and final decision, should, undecided on the merits, be abandoned by the payment of costs, without the consent of the defendant, when, after so much expense and delay, he asks a final judgment upon the merits. In such case the merits are likewise susceptible of being ascertained and settled, which is not the situation of things before pleadings are finished and evidence put in. In my view, then a defendant, under such facts and in such a stage of the cause, has a right to object to a dismissal of the cause, or a discontinuance, [fol. 401] unless by the judgment of the court on the merits, or perhaps a leave granted by it for a discontinuance for strong reasons.'"

Now, that is a recent decision.

The Court: Now, may I make one more inquiry, then I am going to lunch, and that is this: If the defendant wants a decision how much more does he get if the court decides the case than if the plaintiff discontinues. If he has an answer and cross bill, of course, he gets affirmative relief. But if he has not, he gets nothing more by a discontinuance. Now, as far as this Miller concern is concerned, they got just as much by a discontinuance in this suit as if they had been unsuccessful here. But you want to read into that an estoppel by record as against Hollingshead and the whole world.

Mr. Burch: That is what I am trying to read into the Tennessee court, if the Tennessee court will sustain me.

The Court: We will take a recess now, gentlemen, until 2:15.

After Recess

The Court: Am I to understand that the defendant is of the feeling that this case should be decided upon the merits and that it would be decidedly easy upon the defendant's motion to vacate the order of discontinuance and enter a decree upon the merits. To enter a decree upon the merits would involve my examination of the case. My recollection is that the prior art is all that is of any interest in this case. How would that be?

Mr. Burch: I did not quite get that your Honor.

The Court: I will repeat. All that I had in mind was that possibly the easiest way would be to vacate this decree of discontinuance and decide the case upon the merits.

Mr. Jones: As if the decree had not been made at all?

The Court: Yes.

Mr. Burch: Does your Honor decide that now?

The Court: I do not see why that would not be a perfectly good way out of the situation.

[fol. 402] Mr. Williams: I do not know whether you are interested in hearing a suggestion as to another way.

The Court: Yes, I would be glad to hear of many ways.

Mr. Williams: I have one to offer, or a reason for the one that I have proposed in the motion which is before your Honor. I think that we all appreciate before I start that in 1919 $200,000 were invested in this Bassick Manufacturing Company, and no further investment has been made. The business now pays a profit of more than $3,000,000 a year, and the question is whether the pen line that was drawn through those two words was done deliberately, or whether it was unintentional——

The Court: My dear sir, let me suggest something to you. The reason I say if that decree had the effect claimed for it then it had more effect that a determination upon the merits is because a determination upon the merits would be merely an invitation to take an appeal to the Circuit Court, and if you lost there you still have the door open to certiorari to the Supreme Court of the United States.

Now, if I vacate this order of discontinuance and take the case on the merits then it is merely one of 100 patent cases that I decide during the course of the year. Now, I try to

be as conceited as I can be, but I cannot view my decision of any patent case as of very much authority. It is pleasing to me but it has no terrific force or effect. In other words, if the entry of a discontinuance on your motion has the effect that is claimed for it, then it is the most potential thing in life.

Mr. Williams: Well, it is the death of the Bassick Company's business.

Now, answering your Honor's suggestion as to vacation and decision on the merits—the intimation is to your Honor and the assertion is in Tennessee that we knew that the decision of this court was going to be adverse to us, and that we are terrorized at the thought of appearing before the Circuit Court of Appeals for the Third Circuit. I am not going to try to explain my emotional reaction.

The Court: I think that during the course of a trial I expressed myself as not too much in favor of the patent. Now, [fol. 403] I have done that in other cases and after I read the briefs and re-examine the law I came to diametrically opposite conclusions to what my first impressions were.

Mr. Williams: If the court please, I have here three volumes that contain absolutely nothing but the conclusions and decrees and the orders for preliminary injunctions in the United States courts under these patents. We have commenced more than 200 suits under them. I think considerably more than 100 have been decided. Those suits have been brought in additional to the suit here, the Frank Miller case. They have been brought in every district of the United States with the exception I think the Fourth—maybe there are two, I do not remember—but we have brought suit in Philadelphia and in Pittsburgh which have been decided. Your Honor's indications were upon the argument for the motion for preliminary injunction—well, I will not attempt to say—I was not terrorized by what was said then.

The Court: I do not think that any two footed patent lawyer whom I have ever met was terrorized by any court that I have ever seen. In other words, if any patent lawyer or any other lawyer becomes terrorized by reason of any action of the court then it is time for them to surrender their license and say "We will no longer practice law."

Mr. Williams: Whether I was terrorized or not, of course, is of no consequence.

The Court: I assume you were not. You look to me like a man who would not be terrorized by man or devil.

Mr. Burch: I cannot terrorize him. I have tried.

Mr. Williams: By the vacation of that decree and the submission of briefs—there was a motion pending on February 28th to file some exhibits, if they were filed and briefs submitted and the case decided on its merits it could go on the merits to the Third Circuit Court of Appeals. By the astuteness that has been attributed to me, I had this in mind, that in the Sixth Circuit we had the decision in the Circuit Court of Appeals on ten bills and cross bills involving these patents. We have the Hollingshead Company under preliminary injunction there. That was issued more [fol. 404] than a year ago, long before the Frank Miller case was started. The court permitted the defendant to come in with three alternatives and proposed construction and ask the judgment of that court, whether it could make any of these other things without infringement, and the court submitted that to a master, followed several weeks later by the submission of briefs to the Master, who decided that under the decisions of the Sixth Circuit Court of Appeals the Hollingshead Company could not do any of these three things that it proposed to do.

It has been said we should suffer the penalty suggested here, because it was of our doing that the Frank Miller case was started.

I would like to suggest that while we started that suit in complete ignorance of any relationship between the Hollingshead and the Miller Company, the defendant knew before and at all times that there was that relationship and no doubt if they had come into this court and said then, as now, "we are the same as the concern being sued in Tennessee," that this court would then have continued or stayed it pending the outcome of that suit. It was because of our ignorance that we came here and when we learned the true facts and what the defendants have known from the beginning, we endeavored to have this suit discontinued or dismissed, in order that we might proceed with the other to a conclusion, and in a circuit where it so happened that the Sixth Circuit Court of Appeals had announced decisions and where the master there and the other courts have interpreted it to mean that the Miller Company and the Hol-

lingshead Company could not do what they were proposing to do.

As an alternative to your Honor's suggestion I have this to say, that there is an authority, and I know your Honor rightfully wants to hear the best— I have a Circuit Court of Appeals case here, a Ninth Circuit case, reaching a decision that an order such as we have here might be explained or supplemented in the manner we propose. Here the case was based upon facts almost exactly parallel with the facts here, and upon facts which distinguish our case here from any and all of the cases that have been referred to. These cases that are cited involved, almost invariably, a situation where there had been a dismissal in one suit and where subsequently to that the plaintiff undertakes to commence and maintain another suit commenced at a later date, and then the question is whether the dismissal or the adjudication, or the judgment in the first is binding on the second, [fol. 405] and how far. As distinguished from all of those the suit in Tennessee was commenced a year before the suit was commenced here. It had proceeded to the point where there was an injunction issued there, six or eight months before even the commencement of the suit here.

The first suit was the suit commenced against the Hollingshead Company as distinguished from the Frank Miller Company which is, if anything, a subsidiary. It was commenced where we first learned and the only place where we knew anything about any infringement by their concern at the time it was commenced, and it was commenced where the Hollingshead Company, although it has its main office in Camden has one of its many branch establishments which are scattered throughout the country.

No one will deny, who has followed this litigation, that the Bassick Manufacturing Company in its effort to maintain the monopoly the courts have accorded to it, they cannot be said to have hesitated anywhere or against anyone at any time to commence a suit in an effort at least to maintain the rights which it claims to be their own. We commenced that suit there where we learned of the infringement and immediately and where we learned of it, and against the party who apparently was carrying it on.

Now, my other suggestion is the one based upon the case of Bernard v. Able, a case reported in 156 Federal 649, a

decision by the Circuit Court of Appeals for the Ninth Circuit, and from that I wish first to state the facts and then to read a little bit, because the facts are exactly parallel, as it seems to me, with the facts here, and the relief which we ask for here parallels the relief which the court granted there. Preliminary to that, let me say that despite all the authorities which can be read in support of claims upon limitation of the right of the court, after the term, to modify and supplement and so on, every text writer and every court concedes that courts have the right at any time to correct errors in their judgment—inadvertence in their judgment—the inadvertence either of courts or of counsel.

Now, this case of Bernard v. Able involved facts like these. They were petitioners in a bankruptcy proceeding, a petition in involuntary bankruptcy. Those petitioners had suits pending in the state courts, which had been commenced. They saw fit to come in in the bankruptcy proceeding and moved to dismiss and their petition was there dis- [fol. 406] missed without any reservation, without any expression of the dismissal being without prejudice. I have exactly stated the facts here as follows: The basis for the suit was a petition in involuntary bankruptcy after answer and replication had been filed. The petitioning creditors moved the court to dismiss the proceeding 'without right to further prosecute.' Thereafter, the court entered a judgment of dismissal, reciting that the motion came on regularly to be heard upon motion of the petitioning creditors praying for a dismissal of this petition without right to further prosecute. And thereupon it was ordered 'that the petition herein be and the same is dismissed without right to further prosecute their claims.'" Tantamount, as I view it, to the flat footed order of dismissal entered in this case. "Thereafter the petitioning creditors moved the court that the order of dismissal be modified so as to show that the right of the petitioning creditors to sue upon their claims in the state courts was preserved by limiting the right to further prosecute, referred to in said order, to bankruptcy proceedings." As we contend here that we should in equity and good conscience have a right to prosecute the suit which we first started against Hollingshead Company. The defendant, Bernard, then objected to the said motion on the ground that the time designated in the notice was beyond the term. The court overruled Ber-

nard's objection and exceptions were allowed. Thereafter on the same date the court entered an order reciting generally: "It appearing to the court that the judgment of dismissal filed in this cause on June 13, 1906, was inadvertently entered, and by inadvertence did not conform to the motion to dismiss the action filed by the petitioners." It was then ordered that the judgment of dismissal be vacated and expunged from the record, and that the bankruptcy proceedings "Is hereby dismissed without right to further prosecute for adjudication of bankruptcy under the national bankruptcy law for any of the causes alleged in the petition herein." It was ordered that said judgment 'be entered nunc pro tunc as of date June 13, 1906.' Bernard thereafter filed a bill of exceptions a bill praying therein for a review of the proceedings. The respondents demurred to the petition for review upon the ground that said petition did not state the facts sufficient to entitle the petitioners to a writ. Now, the opinion of the court in that case was as follows: "The principal question involved is whether the court had authority to vacate the judgment of dismissal, and to make a judgment nunc pro tunc at the time and under [fol. 407] the circumstances stated. * * * 'It is a familiar doctrine,' said the Supreme Court in Insurance Co. v. Boon, 95 U. S. 117, 24 L. Ed. 395, 'that courts always have jurisdiction over their records to make them conform to what was actually done at the time; and, whatever may have been the rule announced in some of the old cases, the modern doctrine is that same orders and amendments may be made at a subsequent term, and directed to be entered, and become of record, as of a former term.' "

"This power is one to make the record speak the truth. It is salutary, and enables courts to prevent injustice through mere mistake or inadvertance of the judge, or counsel, or the clerk. After the expiration of the term at which a judgment is rendered, there is no power in a court of law to amend a record in order to make it show that which did not take place, as to do this would be to exercise a revisory or appellate power of the court's own decisions; but, upon proper showing, the power to correct a record by amending a judgment at a subsequent term is thoroughly well established. * * * The record in this case shows that the first judgment of dismissal did not conform to the motion for dismissal. It clearly appears that litigation

between certain of the creditors and Bernard was pending in the state courts when the order of dismissal of the bankruptcy proceedings was applied for, and that the original motion to dismiss did not contemplate a judicial injunction by the bankrupt court against the pursuit of that litigation. It is evident that all that the court meant by its action was a dismissal of the proceedings in bankruptcy, without right to carry on such proceedings, and such only, any longer. But, by inadvertence, the order read as if it intended to cut the creditors off from carrying on their suits in other courts to recover certain claims. That the court, under the circumstances, was within its power when, upon motion, it made its record speak the exact truth by limiting the words expressing its meaning seems too plain to require further discussion." * * * "Under the circumstances, therefore, if petitioning creditors wished to dismiss their petition in bankruptcy, and to try their suit in the state court, they had a right to move for a dismissal of the bankruptcy matter, and, if the court believed they were in good faith, to obtain such an order. The petition for a writ will be dismissed."

The Court: I think that the largest argument was to the effect that this court after the commencement of a hearing, [fol. 408] or a cause in equity, had no power to dismiss without prejudice. In other words, he makes two arguments—one is that the term having passed the court has lost control over its decree; the other is, that the court at all times has no power to enter a final decree of dismissal over the protest of the defendant.

Mr. Williams: I know of no authority of law, and I do not recall any having been cited, to the effect that the court cannot at any stage short of the decision upon the merits, dismiss without prejudice, except where there is a counterclaim or cross bill asking affirmative relief. Courts have done it. I do not question that. That is, they have refused to dismiss at various stages—sometimes at early stages.

The Pullman case was cited here, where without any trial, simply on bill and answer and tender the court refused to dismiss without prejudice, but I think that the law is that courts are free in these cases to determine at any stage short of the decision, whether or not a case may be dismissed and the terms of the dismissal, the matter of costs, are the things usually that are in debate. I think that the right of dismissal is absolutely under the decision of the

Supreme Court in the Skinner case, within the discretion of the court to make terms. A court might even have required us to pay more than the costs as a condition. I would not question that.

The Court: I would question that very seriously.

Mr. Williams: I mean as a practical matter. Whether you could it enforce it I do not know, but it is of minor consequence to us as a practical matter. The important thing to us is this: The Bassick Company has spent over $560,000 in its effort to maintain these patents and thus far successfully. It has got injunctions against, I think, more than forty manufacturers of this equipment. Now, if something has happened here by inadvertence or deliberately, or how, which results in the situation that the Hollingshead Company is free for all time, under these patents, and need not further regard them, then all they have to do is to say to these people who have been enjoined: "We will make ourselves the channel through which this apparatus may be secured and give a cloak of immunity to you because we are immune." It means that the Bassick Company instead of having a monopoly will be in open competition with practically anyone who wants [fol. 409] to make and sell these things. Now, it cannot maintain a profitable business comparable with what it now has with that kind of competition which the Hollingshead Company alone is in a position to permit, should it choose to carry on, so that practically the thing is of enormous importance to the Bassick Company. This case that I am reading goes on to point out that the intention of the court was there as here I think your Honor said several times during the hearing upon this motion to dismiss "I am not deciding the merits of this case. I am deciding whether or not the motion to dismiss may be granted and so on, and the conditions."

The Bernard case held that the petitioning creditors should, despite the order of dismissal, be foreclosed to further prosecute their bankruptcy case, but that they should have a right to proceed further in the prosecution of other suits as creditors in the state courts. What we are asking here is that the failure to incorporate into the order of February 28th a statement that the decision was not upon the merits—it was said off of the record, and we would like to get into the thing that is recorded here something to show that the decision was not upon the

merits and that it was not intended to prejudice the further prosecution of the suit which had been commenced and which had already progressed to a stage where there was an injunction nominally against the Hollingshead Company, and actually under the state of facts that have since developed effective against the very Frank Miller Company that was here, and as it happens in a jurisdiction where these patents have been upheld and as we view it to be applied to stop other defendants from doing precisely the thing that the Hollingshead and Miller Company decided they had a right to do.

I should like to refer to this excerpt from the Bernard case as it is the only one I know of where the facts are the same as this case. "It is within the power of a court to amend its record of a judgment at a subsequent term to prevent injustice through a mistake or inadvertence of the judge or counsel or the clerk, as by correcting the wording of an order of dismissal which by mistake did not conform to the motion on which it was based."

The Court: My dear sir, I do not think you need cite any authorities for that. A court of equity has jurisdiction to correct written contracts for fraud, accident and mistake. That was one of the basic reasons for courts of equity. Now, if there be any mistakes in its own decrees or own orders it seems absurd to state that it is powerless to touch [fol. 410] them. In other words, if the decrees are not proper decrees, and it has no control over them, then instead of an instrumentality of justice it is an instrumentality of oppression. Now, I know of an instance in this very court where the judgment was entered up that the plaintiff recovered so much money, in accordance with the state practice and without saying that it recovered so much money with interest. We had to ultimately, six or eight years afterward, change that record so that it said "Recover that judgment with interest" as the record had to go outside of the state where they were not familiar with our practice, and the court of Appeals said we had a right to make it correspond with proofs and justice.

Mr. Williams: I have a Pennsylvania case to the same effect.

Then it comes to the alternative, if I rightly understand your Honor whether this case shall be continued and argued and decided on the merits, or whether we shall correct the inadvertence—I think it was that—that we

did not get into that order the provision that it was not intended to preclude the plaintiff from further prosecuting the suit formerly commenced.

The Court: I do not think I have your adversary's views about vacating the order and proceeding to decide the case. I have no particular objections to deciding cases.

Mr. Burch: As I understood the suggestion of your Honor it was vacating the order entirely and then proceeding to decide the case on the merits. By merits I mean bill, answer and proof—the entire record.

The Court: Yes, bill, answer and proofs—the entire record.

Mr. Burch: Of course, your Honor, the only thing that this defendant has been after all this time is a decision. The plaintiff needs no decision. It has the defendant under an injunction. It has won the case as long as that interlocutory injunction continues.

The Court: It can get decisions in other jurisdictions and it can have them here.

[fol. 411] Mr. Burch: As I say, the defendant wants a decision. It wanted it when this case was before your Honor and this motion to dismiss was made.

The Court: It may want a decision, but I never got the briefs very promptly. I have forgotten when the briefs were filed. When were they?

Mr. Williams: There were affidavits filed which led to an argument for preliminary injunction last November, and during the course of the day your Honor said, "Cannot we make this a case on final hearing," and everyone agreed to that, except to the condition that they might file some other affidavits and exhibits, which then was done by the defendant—almost every week for I do not know how many months. There was hardly a week we did not get a letter asking if we would agree that they might put this in and stipulate that, or might add that, and I started to write my brief in this thing, I give you my word six or seven times, and every time I got into it there came a letter from Mr. Kalish, stating that they would like to add something else.

The Court: Did not I finally write to counsel in this case that I would decide the case on the record before me if I did not have the briefs?

Mr. Williams: I do not know that. I asked Mr. Ashton to take up with you the day when both parties might file

briefs, and I think that he was in telephone communication with your Honor, or some one, as to when these briefs should be filed and it was agreed that they should be filed on March 5th or 6th. I think it was March 5th that agreement was finally concluded, about two weeks prior to that time which was at the very time that we learned that the Miller Company was identified, and as we think identical with the Hollingshead Company. Learning that, I thought that the thing to do, as long as he had the other suit in that Circuit, was clearly to finish that one and terminate this, and that obviated the need of filing those briefs.

Now, the record had been growing almost week by week every month until the middle of February, and as a matter of fact defendant's counsel on the very day we made our motion to dismiss, which was on February 28th, had pending before your Honor a motion to further complete their record by filing quite a long list of exhibits. After your Honor had entered this order of dismissal, Mr. Kalish [fol. 412] wanted to know whether his motion for leave to file these things might be granted, and your Honor said in effect "The case is terminated, but if you want to file them go ahead and file them," and I do not know whether they were filed or not. So the situation was that at the end of the argument on preliminary injunction it was agreed that the case should be agreed, as submitted at final hearing, subject to the filing of these additional exhibits on both sides, which was then done and carried on, and being carried on up to the day of the dismissal. Some ten days in advance of that time, it had been agreed between counsel that those proofs would be filed on March 5th, which was five or six days after the dismissal. They never were filed.

The Court: Didn't I write Mr. Ashton asking that briefs be filed?

Mr. Ashton: That is correct, your Honor. Mr. Williams asked me to agree with Mr. Fairbank about the time for briefs. After that agreement was reached and before I notified you, you wrote and asked if you were to assume that the case had been withdrawn, and the circumstances why you wrote that has been apparent from what Mr. Williams has stated.

Mr. Burch: Will your Honor indulge us about five minutes? We would like to have a conference with our client.

The Court: Yes.

After Recess

Mr. Williams: May I say this: This suit in Memphis, although the preliminary injunction motion was granted in March of 1927, and the Master's report was made in October of 1927, went on trial at final hearing on April 26th of this year, 1928, and there we devoted three days to the introduction of evidence on both sides, and I do not think that it will be disputed that the evidence there was the identical evidence that would be offered here. At any rate, that record was then complete, and then we started in on the 27th of April to argue that case and there were five counselors there on behalf of the defendant, and the court had opportunity to hear Mr. Burch's partner, and Judge Keable, on behalf of the defendant.

I made an opening argument on behalf of the plaintiff, and we ran until four o'clock Saturday afternoon. That [fol. 413] was three days. Then the court said this was all very interesting, and he wanted every one to have opportunity to be heard, and said that he would set aside the week of May 21st—that is beginning today—to hear the further arguments in that case. Your Honor knows that I endeavored to arrange a week ago Saturday to arrange for a hearing on this motion at a date earlier than today. Therefore, we moved both of us—I guess the defendant's motion got there first—to continue the further arguments in Memphis until the 23rd, which is day after tomorrow, so that case has reached the stage where there has been trial in open court and argument started, and beginning Wednesday of this week for further argument of this case.

Now, supposing that case is decided before this one. Does not that one then become binding on this? Does not that become res judicata, subject to such questions as may arise because of the pendency of appeal, the question whether or not that judgment is final. As long as we are having a race of courts we are going to be in a terrible turmoil, and it was because we thought that was going to be so that when we learned—I started within a day after I got back to Chicago on February 19th, after I learned from Mr. Otis' letter of this identity of these parties—that day we started to move to dismiss this case and had it here on hearing on February 28th, and no one can deny the fact that while these two suits are proceeded against the same

identical party, one in that jurisdiction and one here, that we are going to have trouble. Every time we go there we will be met with what happened here, and every time we come here we will be met with what happened there.

There is the practical difficulty in carrying out your Honor's suggestion, if I apprehend what it is, that we are due now day after tomorrow at Memphis—We can all get there, and Wednesday morning we will be there to complete arguments that have been commenced. Now, if the court there renders a decision this week Saturday or Friday, is that going then to react in turn and be res judicata. I conceive that it would be, and it is not wise that we made the mistake perhaps of starting two suits. The mistake was made because we were ignorant. We did commence the two suits. There was nothing to indicate that they were the same person, but here we find ourselves in the situation where we have two suits in two different jurisdictions on the same patents, and we find out in the middle of February that we have two suits against the same party.

[fol. 414] Now, the wise thing to do is to stay one suit at least, or dismiss it. We are perfectly satisfied to let our remedy flow from one or the other, but we want it to be a decision on the merits. That is the one that was started first, and it happens that the one in which the defendant is and has been under injunction for more than a year, and because the Circuit Court of Appeals has passed on that, that is the one I would prefer to go ahead with. And, of course, there has not been an adjudication by the Third Circuit Court of Appeals and hope springs eternal. I am not surprised that they would prefer to get the case so that this Circuit might get a shot at it, because I do not think their chances are very good there, but I do think with the suggestion that we vacate and then go to a decision here on the merits that it is going to be a case each time we argue the case in either place that some further steps have been taken in the other and is res judicata and binding upon one or the other, and I do not think it is going to be a helpful conclusion of the litigation to be having right on the heels of the trial an argument there and another decision here. But it is the way your Honor suggests and as your Honor says you will like to hear the defendants and they would like five minutes to confer.

The Court: Now before us the Miller Company is the party defendant, isn't it?

Mr. Williams: Yes.

The Court: Now, it is only by looking through the corporate fiction that you see these other defendants?

Mr. Williams: Yes.

The Court: I do not see exactly why the Memphis decision would be embarrassing to us. It would be interesting, just as the decision of any federal court is interesting, and often persuasive.

Mr. Williams: If there is the identity of parties, which is claimed, when the res judicata is set up there, and if there is the identity which we claimed when we made our motion to dismiss here, which we urge as the sole reason for our motion to dismiss here, then through a decision there when it is a decision upon the merits and final everybody I think would have to concede that is not merely interesting as a [fol. 415] matter of comedy or what you please, but it is binding here.

But assume there is this identity——

The Court: The impression does not register in my mind that this case was discontinued because there was another suit pending between the same parties in another jurisdiction.

Mr. Williams: I did not catch that.

The Court: It was not reflected upon my conscience that at the time this suit was discontinued that it was discontinued because there was another suit between the same parties pending in another jurisdiction.

Mr. Williams: That was the sole basis of the motion.

The Court: I did not examine the motion papers. It happened to be a day when I was rather busy.

Mr. Williams: We have a transcript of what happened. I think all that was said could have been said in five or eight minutes.

The Court: I think that this is possibly what happened.

Mr. Williams: If there is any possible question about it I would like to refer your Honor to our affidavits in support of our bill to dismiss.

The Court: Let me read those while counsel on the other side are confering. My recollection as to what occurred was this, that this matter came up on a day when I had a great many people in court in one way or another, and it

seems that counsel in a patent case were present, and I took a recess for five or ten minutes to see what it was all about, and then somebody said that they wanted to dismiss this suit, and somebody said that they did not want it dismissed and being somewhat lazy and knowing that suits were dismissed in other jurisdictions quite readily and feeling that there was an opportunity whereby I would not have to go over a voluminous record and arrive at a decision on the merits, I said "Quite gladly, I will dismiss this," and then some question arose as to whether this Miller concern in Jersey should be sued again and I had a feel-
[fol. 416] ing that they should not be sued again because they had answered this thing. So I struck out the words "without prejudice," and counsel I think protested rather violently against my using the pen so freely and I said "Well, if I cannot strike that out I will proceed to decide it on the merits." With all due deference to you gentlemen, I was not conscience that in doing that I was creating a condition whereby the property rights of tremendous value was passing from one set of people to another set of people. Now, I do not think that counsel before me felt that was tantamount to throwing these patents out of the window. Ordinarily when a patent case is decided by me, I go into it with a good deal of care, and I think that the patent bar will bear me out, and I certainly was not determining this matter as though it was a matter of any considerable extent, but though it was a case where the plaintiff wanted to be rid of it, and I saw no purpose in working over a set of facts in which the complaining party was not interested.

Mr. Williams: There was a transcript of the motion for the preliminary injunction, and I believe a transcript on the motion to dismiss.

Mr. Jones: The court ordered that no transcript be written.

The Court: I took the motion in Judge Rellstab's room and talked to them as frankly as I would to anyone else. It was not a determination.

Mr. Jones: When it was all over, your Honor directed the reporter not to write this up, so no one got any transcript of it.

Mr. Kalish: In connection with the proceedings of February 28th on motion to dismiss, counsel cannot read the court's mind, but we had a very complete record prepared

opposing the motion to dismiss. That motion was not presented, because the court indicated its willingness to sign the decree as changed.

The Court: Exactly. As I said, it seemed to me that this was a time when a patent case, which was a troublesome case, was going to be withdrawn and that the Miller Company were not going to be oppressed again about this suit. Those were the two impressions I had. In other words, that it was a matter I did not have to decide, and [fol. 417] that the defendant was not going to be hurt again on this matter—that is the man who was actually there in court. Now, if the thing looms as a matter of great importance and my decision is to govern and control property rights generally, then I think that the case ought to be finally decided so that it is open to appeal and so that the people know exactly where they stand. I do not care much one way or another, but I think it is one thing to dismiss a suit that the plaintiff does not want to go on with and the defendant is not much hurt by, and it is another thing to dismiss a suit in which property rights go out of the window.

Mr. Burch: Your Honor made a suggestion to defendant and defendant's counsel which in all fairness and propriety should be responded to, and for that matter we have conferred about it. The suggestion, your Honor as I understand was that one way out would be the setting aside entirely of the decree heretofore entered and deciding the case on the merits; that is on the record as now is.

The Court: As now is, and subject to such necessary additions as either party may feel proper to put in in a reasonable length of time.

Mr. Burch: The matter of time is one of great importance to the defendant, as your Honor appreciates the defendant is under an injunction.

The defendant, Frank Miller, by reason of the Memphis injunction of the Hollingshead Company is under an injunction and the hands of both of them are tied. Reference has been made to $3,000,000 involved in this case. I do not know how many millions the Hollingshead Company is losing or how many millions the other side is losing, but it is the disposition of the defendant to meet the suggestion of your Honor, provided that we may get and, of course, I

am getting on a delicate point when I am suggesting an action by the court——

The Court: Provided you may get an early decision.

Mr. Burch: Provided we may get an early decision.

The Court: Let me give you my best suggestion, as to the time of the decision. I am now trying all these funny [fol. 418] criminal cases. I will continue doing that until about the first of June. Now, I have quite a number of patent cases upon my calender, which will take until about the 30th of June. There is no reason why you should not have a decision sometime not later than the middle of July.

Mr. Jones: It rather makes us nervous to wait that long.

The Court: I thought that was probably much more frank than any other federal court would be with you.

Mr. Jones: My understanding of this is briefly that your Honor will vacate the order that has been made as if it never had been made.

The Court: Yes.

Mr. Jones: And that your Honor decide the case upon its merits upon the record as it now stands.

The Court: With such additions as either party may feel proper to put in in a reasonable length of time.

Mr. Jones: And with the additional suggestion that there be an agreement between counsel that the decision in the Tennessee case be held up until your Honor's decision came in.

The Court: I do not know that they will agree to hold up the decision. How could you control the decision in the Tennessee court?

Mr. Burch: If counsel should join in a request to the Tennessee Judge to withhold his decision until your Honor, passes on this case.

Mr. Williams: As to the expedition with which a decision can be had with one court or the other, Judge Anderson said to us on April 28th that he had certain engagements in Knoxville from which he would return last week, and that he expected to decide this case during this present week—rather the case there. Now, quite aside from that he may not do it, of course; but aside from that there is this difficulty that has occurred to me during the five minute recess. The rule and the law are—I think the rule is that the court may at any time correct an error due to [fol. 419] inadvertence and so forth, and I think that the

rule and the law are that the court may not after the term vacate it or amend and so forth. Now, if it be attempted to vacate the order of February 28th, I should suspect that we would be met with the proposition that in so attempting to vacate the court had tried to do something beyond its power and therefore, the order of vacation is a nullity.

The Court: That is just the reason I offered this dilemma to you gentlemen, and it was intended as a dilemma. I would either take the case, or I would let the decree which was entered stand. Now, your adversary would rather have it vacated than let it stand, and you would rather have it amended and let it stand. I am perfectly willing to do one or two things, either take the case on the merits or let the decree that was entered stand.

Mr. Jones: Either of those two suits us.

Mr. Williams: If it may be agreed that the vacation of that order shall be an effective vacation and can be put in such shape that the order of dismissal will not be urged or set up as res judicata.

The Court: How can it be? My order would simply be: "This matter being opened to the court, it is on such and such a day ordered that the decree of dismissal be and the same is hereby vacated, and the case proceed to final hearing."

Mr. Williams: I question the right of the court, except upon the agreement of the parties to do that.

The Court: All right. The order is already entered.

Mr. Williams: You mean the order of dismissal?

The Court: Yes, your order.

Mr. Williams: The order that I am asking for today.

The Court: No, the order that you had entered.

Mr. Williams: Of February 28th.

The Court: Yes, there is nothing before me.

[fol. 420] Mr. Williams: Well, I do not see how I can bind the defendant by agreeing to the vacation.

The Court: All right, if you want to stand please do just where you are.

Mr. Williams: I am willing that the order be entered, except I want to know that it is a real vacation. It seems to me that the defendants will be left in a position where they can go back to Tennessee *an* say "Judge Bodine on May 21st entered an order vacating the order of dismissal," but they will say that was ineffective and of nullity because he had no right to enter it.

The Court: I do not know what the temerity of counsel may be, but I will assume that the lawyer who enters an order over my signature would not have the temerity to go to another court and say that this order was a nullity, but it so happens that I pulled the leg of the funny fellow who sat on the bench up there in Jersey, and now I want to see what a fool he was.

Mr. Williams: In view of that statement, I agree to the vacation and the deciding of the case on the merits.

The Court: Then you gentlemen prepare an order and put your names on it all around.

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A. V. GULLBORG.

LUBRICATING MEANS.

APPLICATION FILED DEC. 21, 1918.

1,307,734.

Patented June 24, 1919.

Fig. 1

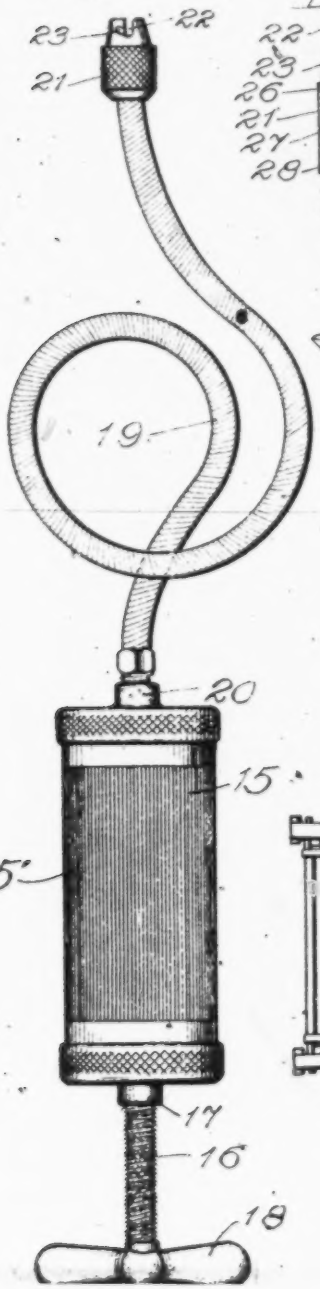
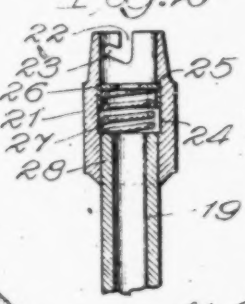


Fig. 2



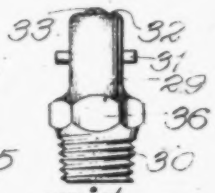


Fig. 3

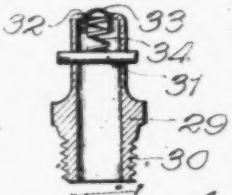


Fig. 4

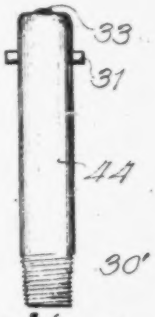


Fig. 9

Fig. 8

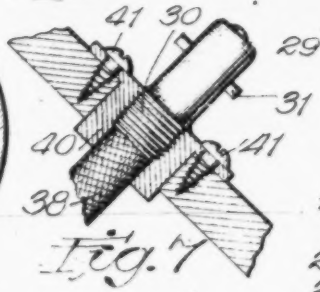


Fig. 7

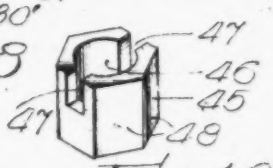


Fig. 10

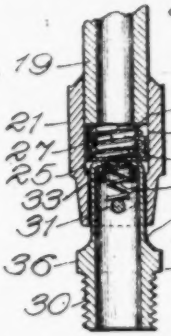


Fig. 5

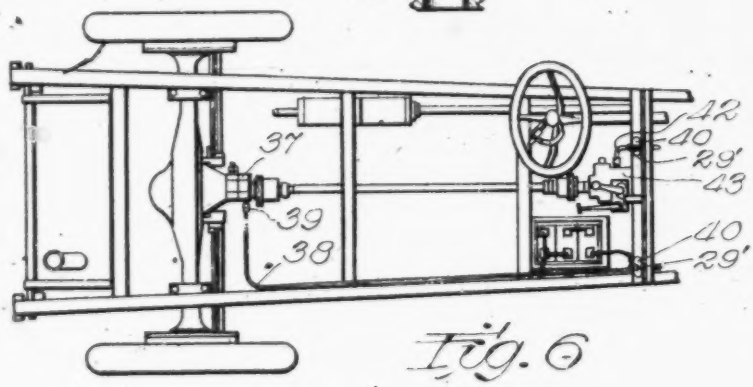
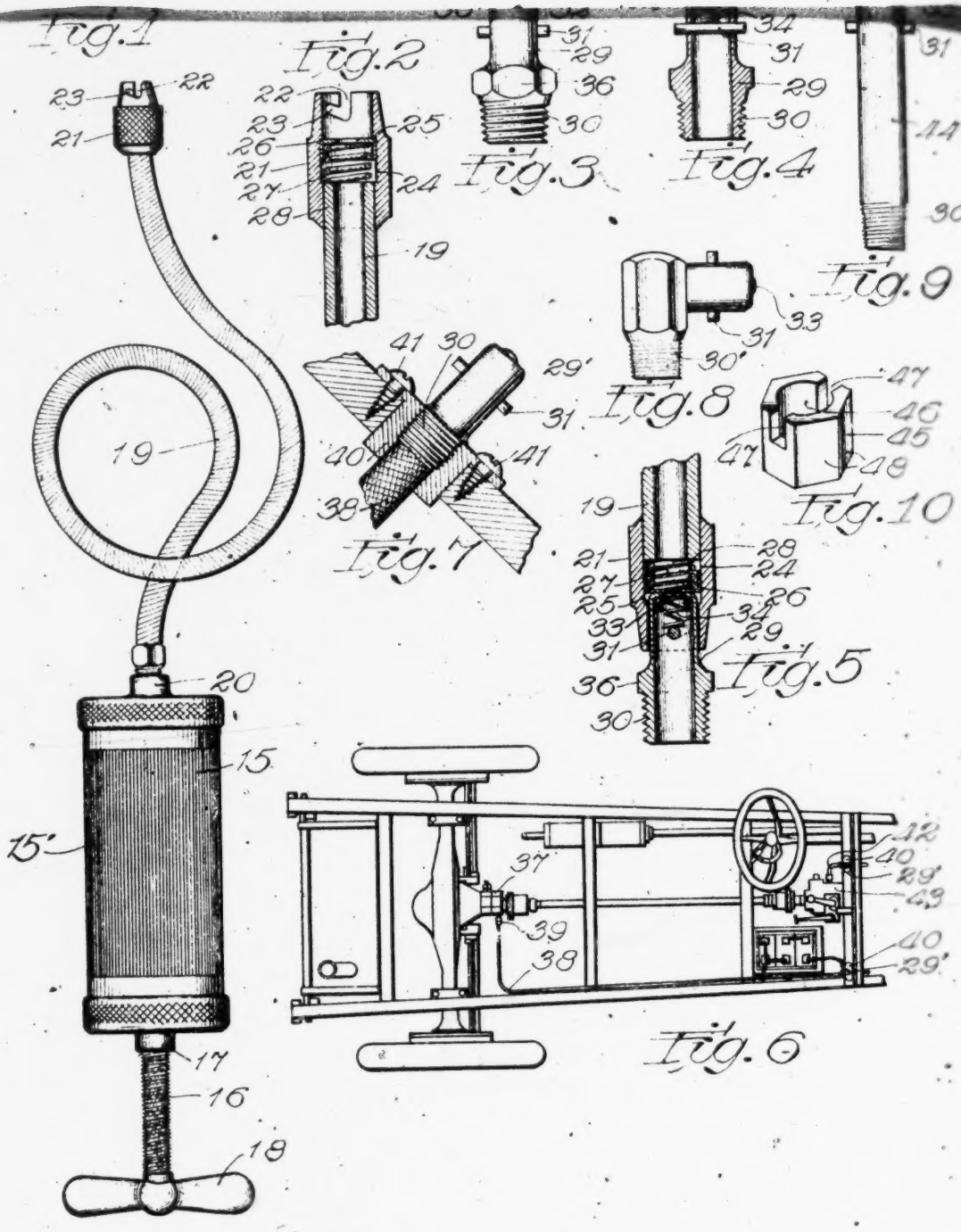


Fig. 6



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Attys.

UNITED STATES PATENT OFFICE.

ARTHUR V. GULLBORG, OF CHICAGO, ILLINOIS.

LUBRICATING MEANS.

1,307,734. Specification of Letters Patent. Patented June 24, 1919.

Application filed December 21, 1918. Serial No. 267,858.

To all whom it may concern:

Be it known that I, ARTHUR V. GULLBORG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Lubricating Means, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to lubricating means, and is especially concerned with means for supplying suitable lubricants to parts of machines or apparatus requiring lubrication where these parts are difficult to gain access to, and is further concerned with the provision of apparatus for supplying lubricants under pressure to movable parts, the said means comprising a grease pump or gun provided with means for detachably connecting it with the various parts to be lubricated.

The objects of my invention are:

1st. To provide novel means for supplying a lubricant under pressure to the parts of an apparatus to be lubricated, the said means comprising a grease pump or gun and means for detachably connecting the discharge of said grease pump or gun with the part to be lubricated.

2nd. To provide novel coupling means for connecting the grease gun with the parts to be lubricated; the said coupling means being so constructed that when the coupling members are uncoupled or disconnected from each other there will be no excess lubricant on the outer ends of the coupling members.

3d. To provide novel means for effectively sealing the joint between the coupling members so that the lubricant may be forced between the parts to be lubricated under a very heavy pressure.

4th. To provide novel means whereby lubricant may be supplied to parts to which it is difficult to gain access.

5th. To provide novel coupling members to be permanently secured to the parts to

Fig. 2 is a longitudinal section through the coupling member thereof;

Fig. 3 is a side elevation of one type of coupling member adapted to be secured to the part to be provided with lubricant and co-acting with the coupling member of my grease gun for connecting the discharge outlet of the grease gun with the part to be lubricated;

Fig. 4 is a longitudinal section of the structure shown in Fig. 3;

Fig. 5 is a longitudinal section through the coupling members shown in Figs. 2 and 4, but taken on a plane at right angles to the section plane of Figs. 2 and 4 showing the two coupling members united;

Fig. 6 is a more or less conventional plan view of an automobile with the body thereof removed showing the novel means which I provide for conveying lubricant to parts ordinarily difficult to gain access to, the front portion of the automobile chassis being broken away;

Fig. 7 is a sectional view showing the means for securing my coupling members to the ends of the conduits for conveying lubricant to the parts difficult of access;

Fig. 8 is a side elevation of a modified form of coupling member;

Fig. 9 is a side elevation of a still further modification of my coupling member; and

Fig. 10 is a perspective view of the means which I employ for rotating the coupling members shown in Fig. 9 in either direction to attach it to or detach it from the part to be provided with a lubricant.

Similar characters of reference refer to similar parts throughout the several views.

Referring to the drawings, the reference character 15 indicates the barrel of my improved grease gun or pump which is provided in a wellknown manner with a plunger, not shown, which is reciprocated in the barrel 15 by means of a screwthreaded piston rod 16 which co-acts with a screwthreaded nut 17, the piston 16 being provided with a handle 18. The barrel 15 is provided with

Application filed December 21, 1918. Serial No. 267,858.

To all whom it may concern:

Be it known that I, ARTHUR V. GULLBORG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Lubricating Means, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to lubricating means, and is especially concerned with means for supplying suitable lubricants to parts of machines or apparatus requiring lubrication where these parts are difficult to gain access to, and is further concerned with the provision of apparatus for supplying lubricants under pressure to movable parts, the said means comprising a grease pump or gun provided with means for detachably connecting it with the various parts to be lubricated.

The objects of my invention are:

1st. To provide novel means for supplying a lubricant under pressure to the parts of an apparatus to be lubricated, the said means comprising a grease pump or gun and means for detachably connecting the discharge of said grease pump or gun with the part to be lubricated.

2nd. To provide novel coupling means for connecting the grease gun with the parts to be lubricated, the said coupling means being so constructed that when the coupling members are uncoupled or disconnected from each other there will be no excess lubricant on the outer ends of the coupling members.

3d. To provide novel means for effectively sealing the joint between the coupling members so that the lubricant may be forced between the parts to be lubricated under a very heavy pressure.

4th. To provide novel means whereby lubricant may be supplied to parts to which it is difficult to gain access.

5th. To provide novel coupling members to be permanently secured to the parts to be lubricated.

6th. To provide novel means to assist in attaching and detaching a tubular coupling member to a part to be lubricated.

Further objects will appear as the description progresses, reference being had to the accompanying drawing in which,

Figure 1 is a side elevation showing my improved grease gun;

Fig. 2 is a longitudinal section through the coupling member thereof;

Fig. 3 is a side elevation of one type of coupling member adapted to be secured to the part to be provided with lubricant and co-acting with the coupling member of my grease gun for connecting the discharge outlet of the grease gun with the part to be lubricated;

Fig. 4 is a longitudinal section of the structure shown in Fig. 3;

Fig. 5 is a longitudinal section through the coupling members shown in Figs. 2 and 4, but taken on a plane at right angles to the section plane of Figs. 2 and 4 showing the two coupling members united;

Fig. 6 is a more or less conventional plan view of an automobile with the body thereof removed showing the novel means which I provide for conveying lubricant to parts ordinarily difficult to gain access to, the front portion of the automobile chassis being broken away;

Fig. 7 is a sectional view showing the means for securing my coupling members to the ends of the conduits for conveying lubricant to the parts difficult of access;

Fig. 8 is a side elevation of a modified form of coupling member;

Fig. 9 is a side elevation of a still further modification of my coupling member; and

Fig. 10 is a perspective view of the means which I employ for rotating the coupling members shown in Fig. 9 in either direction to attach it to or detach it from the part to be provided with a lubricant.

Similar characters of reference refer to similar parts throughout the several views.

Referring to the drawings, the reference character 15 indicates the barrel of my improved grease gun or pump which is provided in a wellknown manner with a plunger, not shown, which is reciprocated in the barrel 15 by means of a screwthreaded piston rod 16 which co-acts with a screwthreaded nut 17, the piston 16 being provided with a handle 18. The barrel 15 is provided with ribs or corrugations 15′ to insure a firm grip of the hand thereon. A flexible conduit 19, of any suitable and wellknown construction, has one end secured to the discharge outlet 20 of my pump and the other end is provided with a hollow coupling member, indicated in general by the reference character 21. The free end of this coupling member, as shown in Fig. 2, is provided with a

bayonet slot 22, the transverse portion 23 of which is inclined from the inner end of the longitudinal portion of the slot toward the outer end of the coupling member for a purpose which will be referred to later on. The bore of the coupling member is enlarged at 24 to provide an annular shoulder 25. A perforated cup leather or sealing disk 26 is slidably mounted in the annular portion 24 of the bore of the coupling and is urged against the shoulder 25 by means of a coiled spring 27, one end of which abuts against the cup leather or sealing disk 26 and the other end of which abuts against the adjacent end 28 of the conduit 19. This end of the conduit may be soldered or secured in any convenient manner to the coupling member.

Referring to Figs. 3 and 4, the reference character 29 indicates as a whole a second coupling member which co-acts with the coupling member just described. This coupling member is in general tubular in form and is provided at one end with screwthreads 30 for securing it to the part to be lubricated. A pin 31 extends through and projects from the opposite sides of the other end of the tubular member. This end of the tubular member is flanged inwardly, as indicated at 32, to form a valve seat with which the hollow capsule shaped valve 33 co-acts. A spring 34 interposed between the pin 31 and the hollow valve 33 urges the latter against the valve seat 32. My purpose in making the valve 33 hollow is, first, to provide sufficient room for the spring 34 without materially increasing the length of the coupling member, and, second, to provide means which will tend to prevent the spring 34 from buckling or flexing longitudinally when the valve 33 is pushed inwardly to admit the lubricant. My invention contemplates the provision of facets 36 to receive the jaws of a wrench whereby the coupling member may be attached to or detached from the parts to be lubricated.

In Fig. 5 I have shown the coupling members 21 and 29 coupled together. In this position it will be noted that the spring 27 is partially compressed and that the sealing disk 26 is displaced from the annular shoulder the coupling member 29. This movement causes an additional small quantity of lubricant to be forced into the coupling member 29. When the coupling member 21 is then turned to permit the pin 31 to slide in the longitudinal portion of the slot 22 the sealing disk 26 is moved toward the end of the coupling member 29 under the pressure of the spring 34. This causes the sealing disk 26 to move toward the outer end of the coupling member 21 and thereby produces a slight vacuum which causes any grease which might otherwise remain on the outer end of the coupling member 29 or the outer side of the valve 33 to be sucked back behind the sealing disk 26, and thereby prevents any excess of lubricant from remaining on the end of the coupling member 29 or on the outside of the valve.

From the above description it will be seen that I have provided means for conveying a lubricant to the part or parts to be lubricated which not only prevents the loss of lubricant, even though the lubricant may be forced between the bearing surfaces under very high pressure, but also prevents the lubricant from remaining upon exposed portions of the coupling members after these have been uncoupled, and subsequently lost. This feature is of importance where, as I will describe later on, the coupling members are located at readily accessible points and where, in case the parts being lubricated form a part of a motor vehicle or other similar structure, the clothes of the operator are likely to come in contact with these coupling members.

Referring to Fig. 6 in which I have disclosed a portion of a motor vehicle with the body thereof removed, the reference character 37 indicates a bearing in the differential casing which is supplied with lubricant by a conduit 38 connected therewith by a suitable hollow coupling 39. The other end of the conduit 38 is brought forwardly in the vehicle and is secured to either the dash or the instrument board, as may be found convenient, by means of a floor socket 40, shown in detail in Fig. 7, which is secured in place by means of the screws 41 and is provided with an internal screwthread for receiving

to provide an annular shoulder 25. A perforated cup leather or sealing disk 26 is slidably mounted in the annular portion 24 of the bore of the coupling and is urged against the shoulder 25 by means of a coiled spring 27, one end of which abuts against the cup leather or sealing disk 26 and the other end of which abuts against the adjacent end 28 of the conduit 19. This end of the conduit may be soldered or secured in any convenient manner to the coupling member.

Referring to Figs. 3 and 4, the reference character 29 indicates as a whole a second coupling member which co-acts with the coupling member just described. This coupling member is in general tubular in form and is provided at one end with screwthreads 30 for securing it to the part to be lubricated. A pin 31 extends through and projects from the opposite sides of the other end of the tubular member. This end of the tubular member is flanged inwardly, as indicated at 32, to form a valve seat with which the hollow capsule shaped valve 33 co-acts. A spring 34 interposed between the pin 31 and the hollow valve 33 urges the latter against the valve seat 32. My purpose in making the valve 33 hollow is, first, to provide sufficient room for the spring 34 without materially increasing the length of the coupling member, and, second, to provide means which will tend to prevent the spring 34 from buckling or flexing longitudinally when the valve 33 is pushed inwardly to admit the lubricant. My invention contemplates the provision of facets 36 to receive the jaws of a wrench whereby the coupling member may be attached to or detached from the parts to be lubricated.

In Fig. 5 I have shown the coupling members 21 and 29 coupled together. In this position it will be noted that the spring 27 is partially compressed and that the sealing disk 26 is displaced from the annular shoulder 25 by the end of the coupling member 29. When the piston of the gun pump is actuated to force lubricant through the conduit 19 under pressure this pressure will cause the sealing disk 26 to seal the joint between the two coupling members and thus prevent any escape of lubricant over the sides of the coupling member 29. On account of the fact that the transverse portion 23 of the bayonet slot in the coupling member 21 is inclined toward the open end of this coupling member it is necessary in order to detach this coupling member from the coupling member 29 to move it toward

ing disk 26 is moved toward the end of the coupling member 29 under the pressure of the spring 34. This causes the sealing disk 26 to move toward the outer end of the coupling member 21 and thereby produces a slight vacuum which causes any grease which might otherwise remain on the outer end of the coupling member 29 or the outer side of the valve 33 to be sucked back behind the sealing disk 26, and thereby prevents any excess of lubricant from remaining on the end of the coupling member 29 or on the outside of the valve.

From the above description it will be seen that I have provided means for conveying a lubricant to the part or parts to be lubricated which not only prevents the loss of lubricant, even though the lubricant may be forced between the bearing surfaces under very high pressure, but also prevents the lubricant from remaining upon exposed portions of the coupling members after these have been uncoupled, and subsequently lost. This feature is of importance where, as I will describe later on, the coupling members are located at readily accessible points and where, in case the parts being lubricated form a part of a motor vehicle or other similar structure, the clothes of the operator are likely to come in contact with these coupling members.

Referring to Fig. 6 in which I have disclosed a portion of a motor vehicle with the body thereof removed, the reference character 37 indicates a bearing in the differential casing which is supplied with lubricant by a conduit 38 connected therewith by a suitable hollow coupling 39. The other end of the conduit 38 is brought forwardly in the vehicle and is secured to either the dash or the instrument board, as may be found convenient, by means of a floor socket 40, shown in detail in Fig. 7, which is secured in place by means of the screws 41 and is provided with an internal screwthread for receiving the screwthreaded portion 30 of a coupling member 29′. This coupling member 29′ is similar to that shown in Figs. 3 and 4, except that it is not provided with the facets 36 for receiving the jaws of a wrench. The forward end of the conduit 38 may be soldered or otherwise secured in the socket 40. The reference character 42 indicates another conduit for conducting oil from the coupling member 29′ to the transmission housing 43.

While I have illustrated means for conducting lubricant to but two portions of this automobile vehicle it is to be under-

stood that conduits similar to 38 and 42 may be used for conducting lubricant to any portion of the vehicle which it is desired to lubricate. Furthermore, this feature of my invention is not to be limited to means for lubricating motor vehicles, but is capable of being used for lubricating any apparatus whether the parts to be lubricated are or are not difficult of access.

In Fig. 8 I have shown a modified form of a coupling member to be secured to a part to be lubricated. This coupling member is L shaped and one end thereof is provided with screwthreads 30′ and the other end thereof being provided with a pin 31 and a spring-pressed valve or closure 33 similar to that described in connection with Figs. 3 and 4. The purpose of this coupling member is to provide means for connecting the coupling member 21 with a part to be lubricated which would otherwise be difficult of access if provided with a straight coupling member such as that shown in Figs. 3 and 4.

In Fig. 9 I have disclosed a still further modification of my coupling member wherein it is formed from a tubular member 44 of substantially constant diameter which is not provided with means for co-acting with a wrench to attach or detach it to the part to be lubricated. In order to thus attach or detach this member I provide the means illustrated in Fig. 10. This means comprises a sleeve-like member 45 having a bore 46 therein for receiving the tubular member 44 and slots 47 for receiving the ends of the pin 31 of the tubular member 44. The member 45 is provided with facets 48 for co-acting with a wrench or other tool for rotating this sleeve.

While I have described the preferred embodiments of my invention it is to be understood that it is capable of other adaptations and modifications within the scope of the appended claims.

Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States is:

1. The combination with a hollow coupling member having a pin projecting from one side thereof and a spring-pressed closure, of a pump having a flexible conduit connected with the outlet thereof, a second for urging said disk against said first named coupling member.

2. The combination with a hollow coupling member having a pin projecting from one side thereof and a spring-pressed closure, of a pump, a discharge conduit having one end secured to the outlet of said pump, a second hollow coupling member for receiving the closed end of said first named coupling member secured to the other end of said conduit and provided with a bayonet slot adapted to co-act with said pin, a perforated sealing disk mounted to reciprocate in the bore of said coupling member, means for yieldingly urging said sealing disk against the closed end of said first named coupling member, and means for limiting the movement of said sealing disk in the direction of said second coupling member.

3. The combination with a hollow coupling member having a spring-pressed closure, of a pump, a discharge conduit having one end secured to the outlet of said pump, a second hollow coupling member for receiving the closed end of said first named coupling member secured to the other end of said conduit, a perforated sealing disk mounted to reciprocate in the bore of said coupling member, means for yieldingly urging said sealing disk against the closed end of said first named coupling member, and means for limiting the movement of said sealing disk toward said second coupling member.

4. The combination with a hollow coupling member having a spring-pressed closure, of a pump, a discharge conduit having one end secured to the outlet of said pump, a second hollow coupling member for receiving the closed end of said first named coupling member secured to the other end of said conduit, a perforated sealing disk mounted to reciprocate in the bore of said coupling member, and means for yieldingly urging said sealing disk against the closed end of said first named coupling member.

5. The combination with a pump having a flexible conduit connected with the outlet thereof, of a hollow coupling member secured to the other end of said conduit and provided with a bayonet slot, the transverse portion of said slot being inclined from the longitudinal portion thereof

whether the parts to be lubricated are or are not difficult of access.

In Fig. 8 I have shown a modified form of a coupling member to be secured to a part to be lubricated. This coupling member is L shaped and one end thereof is provided with screwthreads 30′ and the other end thereof being provided with a pin 31 and a spring-pressed valve or closure 33 similar to that described in connection with Figs. 3 and 4. The purpose of this coupling member is to provide means for connecting the coupling member 21 with a part to be lubricated which would otherwise be difficult of access if provided with a straight coupling member such as that shown in Figs. 3 and 4.

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Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States is:

1. The combination with a hollow coupling member having a pin projecting from one side thereof and a spring-pressed closure, of a pump having a flexible conduit connected with the outlet thereof, a second hollow coupling member secured to the other end of said conduit for receiving the closed end of said first named coupling member and provided with a bayonet slot for receiving said pin, the transverse portion of said slot being inclined from the longitudinal portion thereof toward the outer end of the coupling member, the bore of said coupling member being enlarged to provide a shoulder, a perforated sealing disk slidably mounted in the enlarged portion of said bore, and a spring confined between the ends of said conduit and said disk pump, a second hollow coupling member for receiving the closed end of said first named coupling member secured to the other end of said conduit and provided with a bayonet slot adapted to co-act with said pin, a perforated sealing disk mounted to reciprocate in the bore of said coupling member, means for yieldingly urging said sealing disk against the closed end of said first named coupling member, and means for limiting the movement of said sealing disk in the direction of said second coupling member.

3. The combination with a hollow coupling member having a spring-pressed closure, of a pump, a discharge conduit having one end secured to the outlet of said pump, a second hollow coupling member for receiving the closed end of said first named coupling member secured to the other end of said conduit, a perforated sealing disk mounted to reciprocate in the bore of said coupling member, means for yieldingly urging said sealing disk against the closed end of said first named coupling member, and means for limiting the movement of said sealing disk toward said second coupling member.

4. The combination with a hollow coupling member having a spring-pressed closure, of a pump, a discharge conduit having one end secured to the outlet of said pump, a second hollow coupling member for receiving the closed end of said first named coupling member secured to the other end of said conduit, a perforated sealing disk mounted to reciprocate in the bore of said coupling member, and means for yielding urging said sealing disk against the closed end of said first named coupling member.

5. The combination with a pump having a flexible conduit connected with the outlet thereof, of a hollow coupling member secured to the other end of said conduit and provided with a bayonet slot, the transverse portion of said slot being inclined from the longitudinal portion thereof toward the outer end of the coupling member, the bore of said coupling member being enlarged to provide a shoulder, a perforated sealing disk slidably mounted in the enlarged portion of said bore, and a spring confined between the ends of said conduit and said disk for urging said disk toward said shoulder.

6. The combination with a pump having a discharge outlet, of a coupling member connected with said discharge outlet and provided with a bayonet slot, the transverse

portion of said slot being inclined from the inner end of the longitudinal portion thereof toward the outer end of said coupling member, a perforated sealing disk slidably mounted in the bore of said coupling member, and means for yieldingly urging said sealing disk toward the outer end of said coupling member, and means for limiting the movement of said sealing disk toward the outer end.

7. The combination with means for supplying lubricant under pressure, said means comprising a discharge outlet, of a coupling member connected with said discharge outlet, a perforated cup leather slidably mounted in said coupling member, and means for yieldingly urging said cup leather toward the outer end of said coupling member.

8. The combination with an apparatus having a part to be lubricated, of a conduit for conducting lubricant to said part, a coupling member secured to the end of said conduit and provided with a spring-pressed valve closure, means for supplying lubricant to said conduit comprising a receptacle provided with a discharge outlet, a second coupling member connected with said discharge outlet, means for detachably uniting said coupling members, and means for sealing the joint between said coupling member and for removing excess lubricant from the adjacent ends thereof when said coupling members are uncoupled.

9. The combination with an apparatus having a part to be lubricated, of a conduit for conducting lubricant to said part, a coupling member secured to the end of said conduit and provided with means for supplying lubricant to said conduit comprising a receptacle provided with a discharge outlet, a second coupling member connected with said discharge outlet, means for detachably uniting said coupling members, and a pliable gasket for sealing the joint between said coupling members.

10. The combination with an apparatus having a part to be lubricated, of a conduit for conducting lubricant to said part, a coupling member secured to the end of said conduit and provided with means for supplying lubricant to said conduit comprising a receptacle provided with a discharge coupling member, means for detachably connecting said members, and means for sealing said connection comprising a gasket positioned between said members and held against one of said members by the pressure of the lubricant.

12. The combination with a bearing provided with a member for receiving lubricant, of means for supplying lubricant thereto comprising a hollow member, means for supplying lubricant to said hollow member under pressure, means for detachably connecting said members, means for sealing said connection comprising a gasket positioned between said members and held against one of said members by the pressure of the lubricant, and a spring for initially positioning said gasket against said member.

13. The combination with a receptacle for receiving lubricant, of means for supplying lubricant to said receptacle comprising a hollow member, means for forcing lubricant into said hollow member under pressure, and means for connecting said hollow member to said receptacle in fluid-tight relation comprising a pliable member positioned in said hollow member and having one face for contacting with said receptacle, the other face of said pliable member being subjected to the pressure of the lubricant in said hollow member.

14. The combination with a grease cup comprising a tubular member having one end flanged inwardly to provide a closure seat, a closure, a pin extending through said tubular member and from both sides thereof, and a spring confined between said pin and closure, and tending to hold said closure on its seat, of a grease pump having a discharge conduit, and means co-acting with the ends of said pin for detachably connecting the discharge end of said conduit with said grease pump.

15. The combination with a grease cup comprising a tubular member having a closure seat, a closure, a pin extending through said tubular member and from both sides thereof, and a spring confined between said pin and closure, and tending to hold said closure on its seat, of a grease pump having a discharge conduit, and means co-acting with the ends of said pin for detachably connecting the discharge end of said conduit

urging said sealing disk toward the outer end of said coupling member, and means for limiting the movement of said sealing disk toward the outer end.

7. The combination with means for supplying lubricant under pressure, said means comprising a discharge outlet, of a coupling member connected with said discharge outlet, a perforated cup leather slidably mounted in said coupling member, and means for yieldingly urging said cup leather toward the outer end of said coupling member.

8. The combination with an apparatus having a part to be lubricated, of a conduit for conducting lubricant to said part, a coupling member secured to the end of said conduit and provided with a spring-pressed valve closure, means for supplying lubricant to said conduit comprising a receptacle provided with a discharge outlet, a second coupling member connected with said discharge outlet, means for detachably uniting said coupling members, and means for sealing the joint between said coupling member and for removing excess lubricant from the adjacent ends thereof when said coupling members are uncoupled.

9. The combination with an apparatus having a part to be lubricated, of a conduit for conducting lubricant to said part, a coupling member secured to the end of said conduit and provided with means for supplying lubricant to said conduit comprising a receptacle provided with a discharge outlet, a second coupling member connected with said discharge outlet, means for detachably uniting said coupling members, and a pliable gasket for sealing the joint between said coupling members.

10. The combination with an apparatus having a part to be lubricated, of a conduit for conducting lubricant to said part, a coupling member secured to the end of said conduit and provided with means for supplying lubricant to said conduit comprising a receptacle provided with a discharge outlet, a second coupling member connected with said discharge outlet, and means for detachably uniting said coupling members and for removing excess lubricant from the adjacent ends thereof when said coupling members are uncoupled.

11. The combination with a bearing provided with a member for receiving lubricant, of means for supplying lubricant thereto comprising a hollow member, means for supplying lubricant to said hollow member under pressure, means for detachably connecting said members, means for sealing said connection comprising a gasket positioned between said members and held against one of said members by the pressure of the lubricant, and a spring for initially positioning said gasket against said member.

13. The combination with a receptacle for receiving lubricant, of means for supplying lubricant to said receptacle comprising a hollow member, means for forcing lubricant into said hollow member under pressure, and means for connecting said hollow member to said receptacle in fluid-tight relation comprising a pliable member positioned in said hollow member and having one face for contacting with said receptacle, the other face of said pliable member being subjected to the pressure of the lubricant in said hollow member.

14. The combination with a grease cup comprising a tubular member having one end flanged inwardly to provide a closure seat, a closure, a pin extending through said tubular member and from both sides thereof, and a spring confined between said pin and closure, and tending to hold said closure on its seat, of a grease pump having a discharge conduit, and means co-acting with the ends of said pin for detachably connecting the discharge end of said conduit with said grease pump.

15. The combination with a grease cup comprising a tubular member having a closure seat, a closure, a pin extending through said tubular member and from both sides thereof, and a spring confined between said pin and closure, and tending to hold said closure on its seat, of a grease pump having a discharge conduit, and means co-acting with the ends of said pin for detachably connecting the discharge end of said conduit with said grease cup.

16. The combination with a grease gun having a discharge conduit, of means for connecting said conduit with a bearing comprising a tubular member, co-acting means on said conduit and said tubular member for detachably connecting said conduit and tubular members, and a flexible member for sealing the joint between said conduit and said tubular member, said flexible member having an aperture for the passage of lu-

bricant from said conduit to said tubular member, a portion of one face of said flexible member being positioned so as to be subjected to any pressure created in said conduit to force it against said tubular member.

17. The combination with means for supplying lubricant under pressure comprising a discharge member, of means for connecting said discharge member to a bearing comprising a tubular member, and means for detachably connecting said members in sealed relation comprising means subjected to the pressure created in said members, the said means being positioned between said members and held against one of said members by said pressure.

18. The combination with a member for receiving lubricant, of means for supplying lubricant thereto under pressure comprising a tubular member, means for detachably connecting said tubular member to said lubricant-receiving member in sealed relation comprising a flexible member provided with an aperture for the passage of lubricant, one face of said member being subjected to the pressure of the lubricant.

In witness whereof, I hereunto subscribe my name this 14th day of December, 1918.

ARTHUR V. GULLBORG.

Witnesses:

JOHN E. CARLSON,

JOHN L. STEFFEN.

DISCLAIMER.

1,307,734.—*Arthur V. Gullborg*, Chicago, Ill. LUBRICATING MEANS. Patent dated June 24, 1919. Disclaimer filed August 29, 1927, by the assignee by mesne assignments, *The Bassick Manufacturing Company.*

Hereby enters this disclaimer to that part of the claims in said specification which is in the following words, to wit:

"12. The combination with a bearing provided with a member for receiving lubricant, of means for supplying lubricant thereto comprising a hollow member, means for supplying lubricant to said hollow member under pressure, means for detachably connecting said members, means for sealing said connection comprising a gasket positioned between said members and held against one of said members by the pressure of the lubricant, and a spring for initially positioning said gasket against said member."

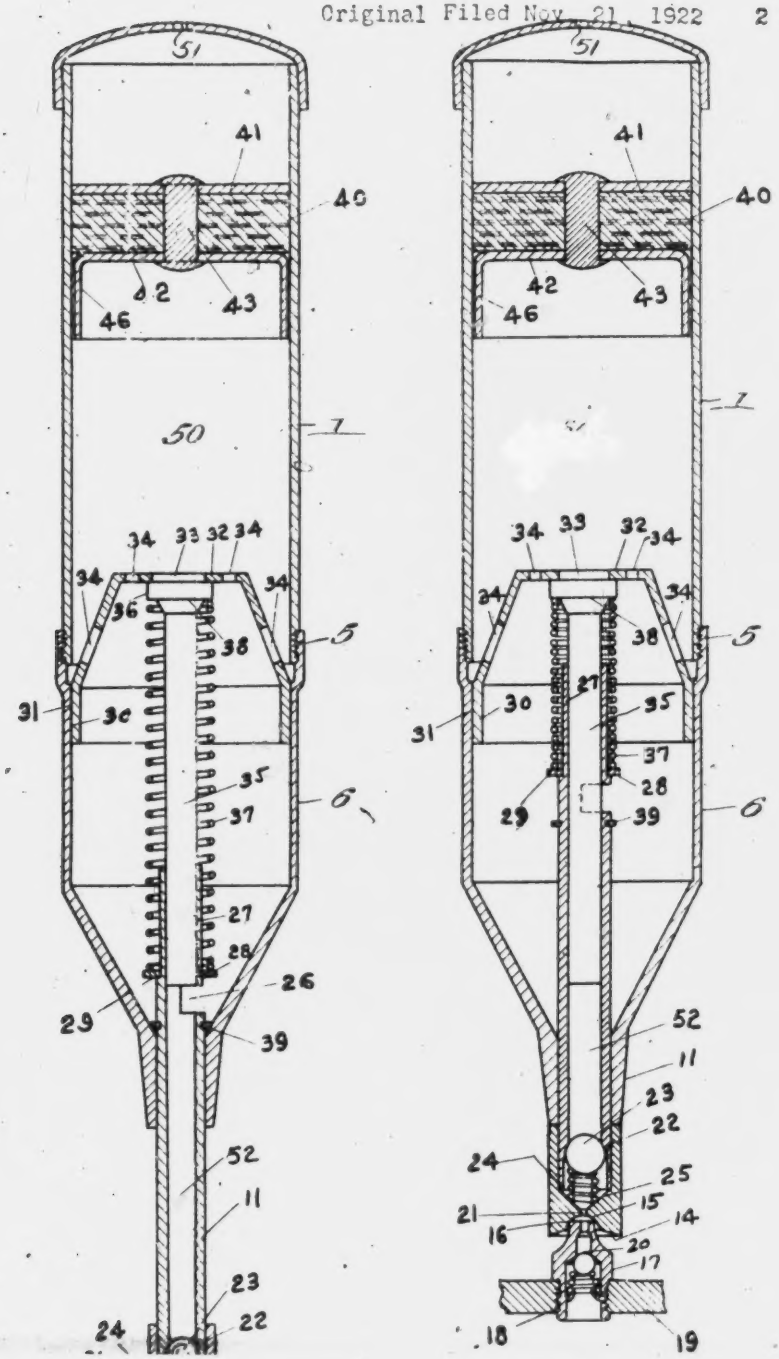
[*Official Gazette September 13, 1927.*]

Dec. 4, 1923. 1,475,980

O. ZERK

LUBRICATING APPARATUS

Original Filed Nov. 21, 1922 2 Sheets-Sheet 1



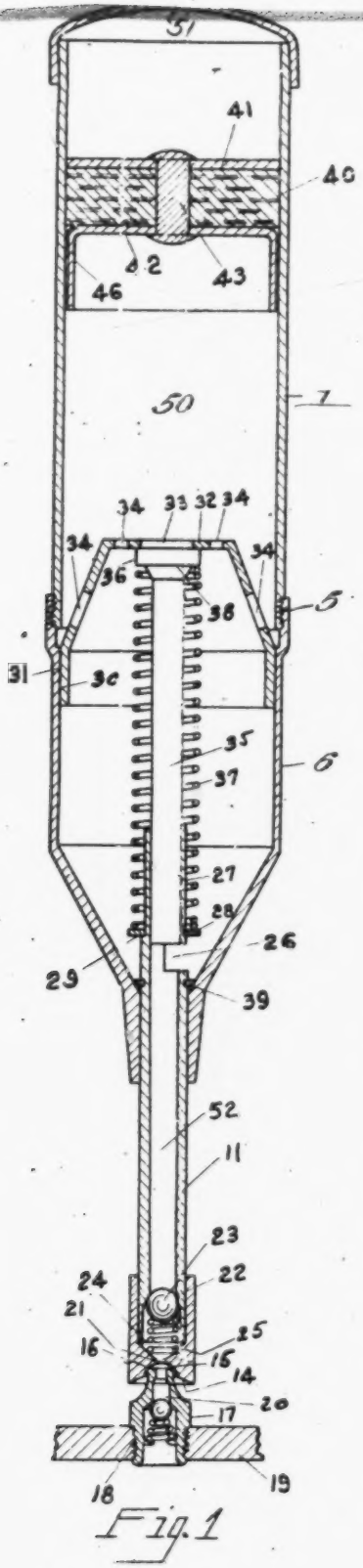


Fig. 1

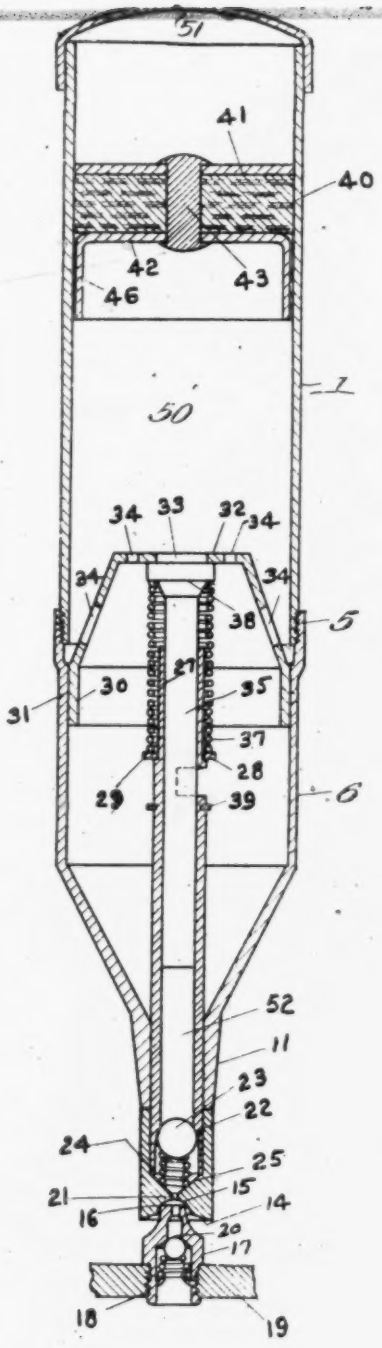


Fig. 2

INVENTOR
OSCAR ZERK
BY Richey Slough & Watts,
HIS ATTORNEYS

Dec. 4, 1923. 1,475,980

O. ZERK

LUBRICATING APPARATUS

Original Filed Nov. 21, 1922 2 Sheets-Sheet 2

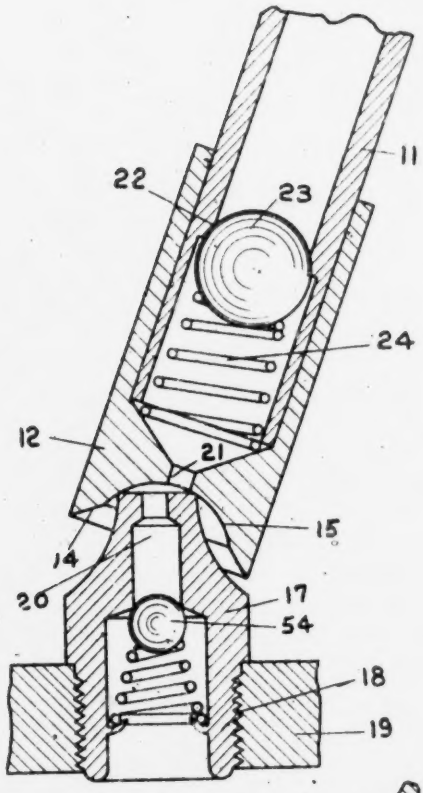


Fig. 3

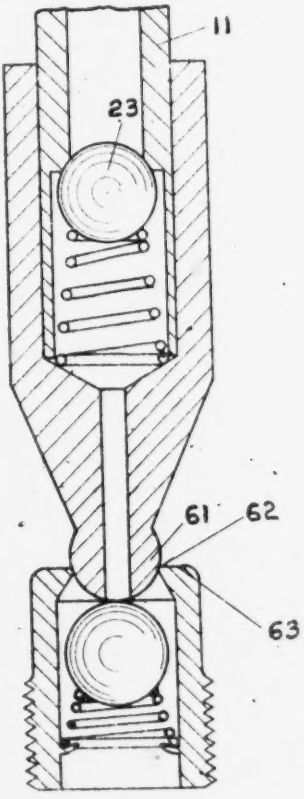
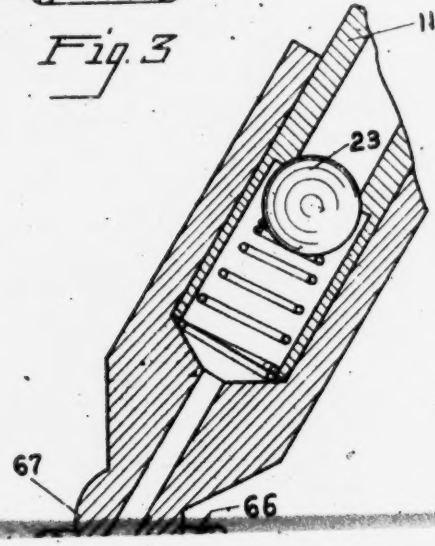


Fig 4



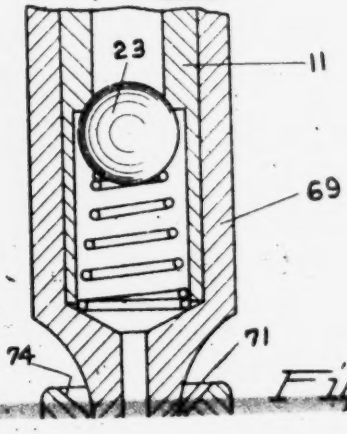


Fig 6

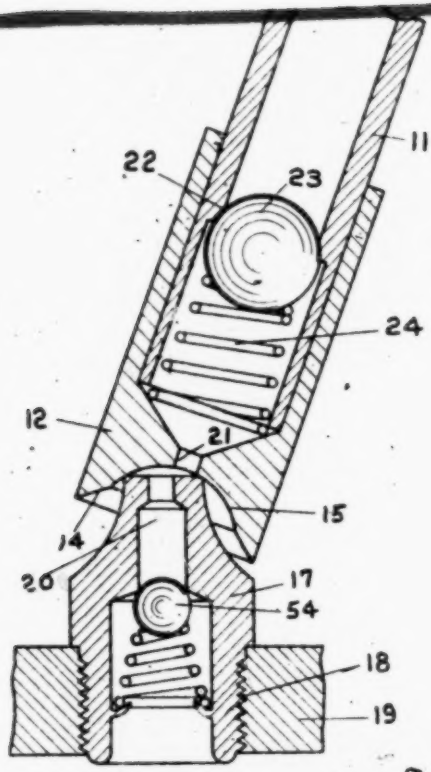


Fig. 3

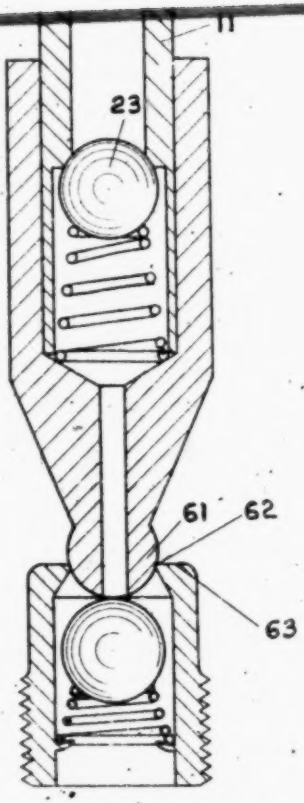


Fig 4

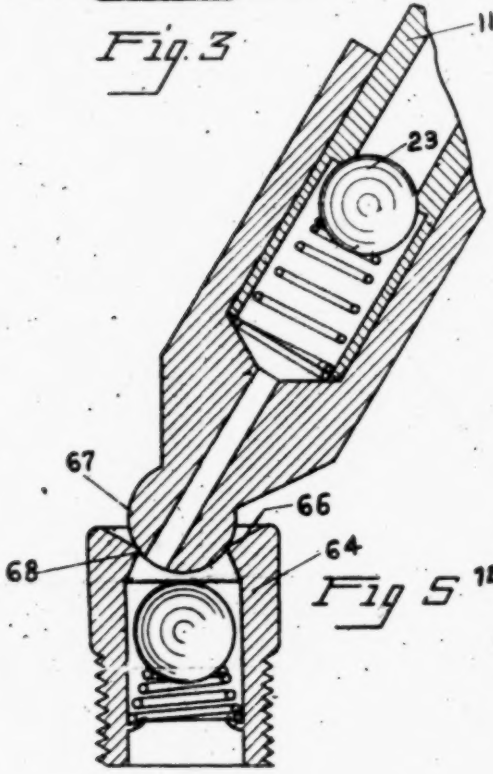


Fig 5

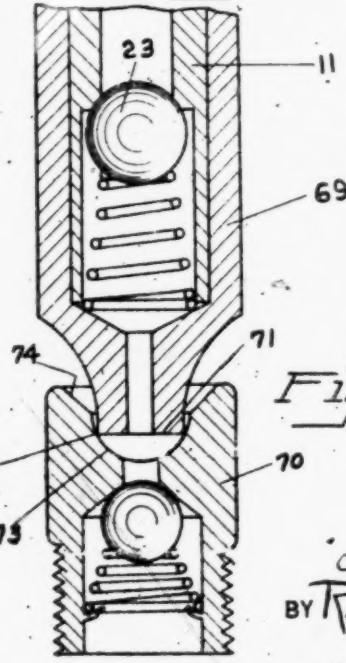


Fig 6

INVENTOR
OSCAR ZERK
BY Richey Slough + Watts
HIS ATTORNEYS

420

Patented Dec. 4, 1923. 1,475,980

UNITED STATES PATENT OFFICE.

OSCAR ZERK, OF CLEVELAND, OHIO, ASSIGNOR TO THE ALLYNE-ZERK COMPANY, OF CLEVELAND, OHIO.

LUBRICATING APPARATUS.

Original application filed November 21, 1922. Serial No. 602,465. Divided and this application filed August 2, 1923. Serial No. 655,294.

To all whom it may concern:

Be it known that I, OSCAR ZERK, a citizen of Republic of Czechoslovakia, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Lubricating Apparatus, of which the following is a specification.

My invention relates to improvements in lubricating apparatus.

In the lubrication of moving elements, and especially in automobiles, it has become uniform practice to provide the elements with inlet nipples, to which a grease or oil gun is detachably secured. Generally, the gun is provided with a flexible outlet tube having at its end a coupling which is adjusted manually and locked against the inlet nipple to provide a tight joint therebetween. After the user has locked the coupling by hand, he then grasps the gun barrel with one hand and with the other hand screws the plunger down, forcing the grease through the conduit.

These several operations each require considerable time, are often performed from awkward positions, and further, in handling the coupling, from which grease leaks during the pressure operation and especially after being removed, the user's hands become greasy and dirty causing the gun and the coupling to slip when handled, and necessitating additional time in which to perform the attaching and detaching operations.

The main object of my invention resides in overcoming these objections by so constructing a pistol and a nipple, that the pistol can be held in one hand and placed in direct osculatory, leak proof contact with the nipple, and while so held will inject lubricant into the nipple, when direct pressure and a connector, so that one provides a peripheral circular edge which fits against a spherical surface of the other, to provide a leak proof pressure maintained contact therebetween, which when pressed together in varying angular relations the circular edge remains covered by the dome-shaped portion of the spherically shaped surface within such circular edge.

Another object of my invention resides in the construction of a lubricant dispensing pistol consisting of a barrel having pressure creating means associated therewith, a lubricant exit and a handle portion whereby the user can grasp the pistol by its handle portion with one hand and by direct pressure, form a leak proof connection between the exit and a nipple inlet opening, to allow the lubricant to pass under pressure and without loss from the pistol into the nipple.

Another object of my invention is to provide an improved lubricating system comprising a gun with a lubricant reservoir and a nozzle, the said nozzle having a contact face with a centrally disposed exit opening together with a lubricant receiving nipple with a face having an inlet opening positioned preferably centrally thereof, the one face having a peripheral circular edge and the other face having a spherically shaped surface, and means adapted to eject lubricant under pressure from the said exit opening, the said nozzle contact face being adapted to be pressed against that of the nipple by the operator pressing the gun toward the nipple from any one of a number of different angular directions, the manual pressure so exerted being adapted to cause the ejection of lubricant from the nozzle into the nipple and at the same time to provide sufficient pressure to maintain a tight

Original application filed November 21, 1922. Serial No. 602,465. Divided and this application filed August 2, 1923. Serial No. 655,294.

To all whom it may concern:

Be it known that I, Oscar Zerk, a citizen of Republic of Czechoslovakia, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Lubricating Apparatus, of which the following is a specification.

My invention relates to improvements in lubricating apparatus.

In the lubrication of moving elements, and especially in automobiles, it has become uniform practice to provide the elements with inlet nipples, to which a grease or oil gun is detachably secured. Generally, the gun is provided with a flexible outlet tube having at its end a coupling which is adjusted manually and locked against the inlet nipple to provide a tight joint therebetween. After the user has locked the coupling by hand, he then grasps the gun barrel with one hand and with the other hand screws the plunger down, forcing the grease through the conduit.

These several operations each require considerable time, are often performed from awkward positions, and further, in handling the coupling, from which grease leaks during the pressure operation and especially after being removed, the user's hands become greasy and dirty causing the gun and the coupling to slip when handled, and necessitating additional time in which to perform the attaching and detaching operations.

The main object of my invention resides in overcoming these objections by so constructing a pistol and a nipple, that the pistol can be held in one hand and placed in direct osculatory, leak proof contact with the nipple, and while so held will inject lubricant into the nipple, when direct pressure is applied thereto.

Another object of my invention resides in providing a pistol with a metal connector which is so shaped that it forms a leak proof direct metal to metal contact with a nipple.

Another object of my invention resides in constructing the contact portions of the nipple and the connector, so that a leak proof, direct pressure contact can be manually maintained between a surface of the one and an edge of the other.

Another object of my invention is to construct the contacting portions of a nipple and a connector, so that one provides a peripheral circular edge which fits against a spherical surface of the other, to provide a leak proof pressure maintained contact therebetween, which when pressed together in varying angular relations the circular edge remains covered by the dome-shaped portion of the spherically shaped surface within such circular edge.

Another object of my invention resides in the construction of a lubricant dispensing pistol consisting of a barrel having pressure creating means associated therewith, a lubricant exit and a handle portion whereby the user can grasp the pistol by its handle portion with one hand and by direct pressure, form a leak proof connection between the exit and a nipple inlet opening, to allow the lubricant to pass under pressure and without loss from the pistol into the nipple.

Another object of my invention is to provide an improved lubricating system comprising a gun with a lubricant reservoir and a nozzle, the said nozzle having a contact face with a centrally disposed exit opening together with a lubricant receiving nipple with a face having an inlet opening positioned preferably centrally thereof, the one face having a peripheral circular edge and the other face having a spherically shaped surface, and means adapted to eject lubricant under pressure from the said exit opening, the said nozzle contact face being adapted to be pressed against that of the nipple by the operator pressing the gun toward the nipple from any one of a number of different angular directions, the manual pressure so exerted being adapted to cause the ejection of lubricant from the nozzle into the nipple and at the same time to provide sufficient pressure to maintain a tight lubricant proof contact between the circular edge of the one contact face with the spherical surface of the other contact face which engages it.

The invention further resides and consists in the arrangement and combinations of parts hereinafter described and claimed, reference being had to the accompanying drawings wherein—

Fig. 1 is a medial vertical longitudinal sectional view of an embodiment of my invention.

Fig. 2 is a similar longitudinal section of

the same in osculatory manual pressure maintained contact with an improved nipple adapted to cooperate therewith, each of the parts being shown in lubricant discharging position.

Fig. 3 shows an enlarged view of the nozzle and nipple illustrated in Figs. 1 and 2, but the nozzle being presented angularly to the nipple.

Fig. 4 shows another embodiment of my invention comprising a nozzle terminating in a ball having a forward spherical end face together with a nipple adapted to co-operate therewith.

Fig. 5 shows another embodiment of my invention comprising the same kind of nozzle end together with a nipple contact face with a surrounding guide portion, the nozzle being present angularly to the nipple.

Fig. 6 shows another embodiment of my invention wherein the contact faces of the nozzle and nipple as shown in Figs. 1 to 3 inclusive are reversely formed, that of the nipple in this embodiment being similar to that of the nozzle in the first embodiment, and vice versa.

Referring now to all of the drawings, in all of which like parts are indicated by like reference characters;

At 1 I show a cylindrical lubricant containing reservoir, or barrel, having a cover 2 at its rear or breech end. The barrel has its forward or muzzle end threaded externally as shown at 5, and over which threads a head 6 is adapted to be screw-threaded so as to rigidly secure the head 6 to the barrel 1. The head 6 comprises preferably a cylindrical portion 7 and a tapered end 8, together with a bearing portion 9, the bearing portion 9 being of reduced diameter and containing a cylindrical bore 10, which is disposed in axial alignment, preferably, with the reservoir barrel 1.

Within the bore 10 a cylindrical tube 11 is adapted to telescope the external cylindrical walls of the tube making a close fit with the internal cylindrical walls of the bore 10. At the end of the tube 11 a nozzle 12 is rigidly affixed, as by driving the nozzle 12 onto the end of the tube 11, the end of the tube making a tight driving fit [illegible] bearing surfaces to the center of the contact face within the rim 16, and communicating with the nozzle orifice 21 of the gun. The tube 11 has its forward end, fitting within the cylindrical nozzle walls 13, of increased internal diameter, so as to provide a valve seat 22 for a check valve ball 23, spring pressed against such seat by a spiral spring 24, bearing against the valve ball, and seating against the end wall 25 of the nozzle recess.

The tube 11 projects within the head 6 and contains therein a port 26 and a plunger guide portion 27, the said plunger guide portion extending beyond the port 26 toward the interior of the gun. The guide portion 27 carries a washer 28 seated against a shoulder 29 which results from the making of the end of the guide portion 27 of slightly reduced external diameter. A metallic bridge 30 is rigidly secured to the head 6 as by making it a tight driving fit within the portion 31 of the head, or by electrically welding it to such portion, or in any other well known suitable way, and is preferably substantially cup shaped, its bottom wall 32 being perforated at 33 and elsewhere, as shown variously at 34.

At 35 I show a piston plunger comprising a relatively long cylindrical rod and a rear enlarged head or flanged portion 36, the end of the head 36 being adapted to seat on the bottom wall 32 of the bridge 30, the head 36 being of larger diameter than the diameter of the opening 33 through such bottom wall.

A spiral compression spring 37 is disposed between the inner face 38 of the flanged end 36 of the plunger 35 and the washer 29, which is carried upon the guide portion 27 of the telescoping tube 11, the spring 37 serves to exert a separating pressure on the plunger and the tube, so as to tend to keep them in extended positions, as shown in Fig. 1, and to retract them to such positions after a discharging operation, wherein the plunger and the tube have been telescoped to the positions shown in Fig. 2, as will be later described. The tube 11 is maintained in the position shown in Fig. 1 by the pressure of the spring 37, by virtue of a washer 39, which is sprung into place [illegible]

nipple.

Fig. 4 shows another embodiment of my invention comprising a nozzle terminating in a ball having a forward spherical end face together with a nipple adapted to co-operate therewith.

Fig. 5 shows another embodiment of my invention comprising the same kind of nozzle end together with a nipple contact face with a surrounding guide portion, the nozzle being present angularly to the nipple.

Fig. 6 shows another embodiment of my invention wherein the contact faces of the nozzle and nipple as shown in Figs. 1 to 3 inclusive are reversely formed, that of the nipple in this embodiment being similar to that of the nozzle in the first embodiment, and vice versa.

Referring now to all of the drawings, in all of which like parts are indicated by like reference characters;

At 1 I show a cylindrical lubricant containing reservoir, or barrel, having a cover 2 at its rear or breech end. The barrel has its forward or muzzle end threaded externally as shown at 5, and over which threads a head 6 is adapted to be screw-threaded so as to rigidly secure the head 6 to the barrel 1. The head 6 comprises preferably a cylindrical portion 7 and a tapered end 8, together with a bearing portion 9, the bearing portion 9 being of reduced diameter and containing a cylindrical bore 10, which is disposed in axial alignment, preferably, with the reservoir barrel 1.

Within the bore 10 a cylindrical tube 11 is adapted to telescope the external cylindrical walls of the tube making a close fit with the internal cylindrical walls of the bore 10. At the end of the tube 11 a nozzle 12 is rigidly affixed, as by driving the nozzle 12 onto the end of the tube 11, the end of the tube making a tight driving fit within the cylindrical walls 13 of the nozzle.

Now referring first to the particular embodiment of my invention illustrated in Figs. 1, 2 and 3, the nozzle is recessed at its front and rear portions, the rear recess containing the cylindrical walls 13 and the forward recess containing the outer flared guiding walls 14 and a spherical contact face 15.

The spherical contact face 15 is adapted to be engaged by the circular rim 16 of a bearing receiving nipple 17, screw-threaded by its stem 18 into the frame 19 adjacent a machine bearing, the nipple containing a passageway 20 leading from the 23, bearing against the valve ball, and seating against the end wall 25 of the nozzle recess.

The tube 11 projects within the head 6 and contains therein a port 26 and a plunger guide portion 27, the said plunger guide portion extending beyond the port 26 toward the interior of the gun. The guide portion 27 carries a washer 28 seated against a shoulder 29 which results from the making of the end of the guide portion 27 of slightly reduced external diameter. A metallic bridge 30 is rigidly secured to the head 6 as by making it a tight driving fit within the portion 31 of the head, or by electrically welding it to such portion, or in any other well known suitable way, and is preferably substantially cup shaped, its bottom wall 32 being perforated at 33 and elsewhere, as shown variously at 34.

At 35 I show a piston plunger comprising a relatively long cylindrical rod and a rear enlarged head or flanged portion 36, the end of the head 36 being adapted to seat on the bottom wall 32 of the bridge 30, the head 36 being of larger diameter than the diameter of the opening 33 through such bottom wall.

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Within the gun barrel 1, I provide a piston or movable reservoir wall, said piston or movable wall comprising, preferably, an intermediate cork piston 40, and clamping end washers 41 and 42. At 43 I show a clamping rivet, the intermediate portion being of slightly reduced diameter and passing through cylindrical aligned

openings in the cork piston 40 and washers 41 and 42, said openings being preferably axial relative to the bore of the barrel 1, within which bore the piston is adapted to be reciprocated.

The washer 42 is preferably cup-shaped, having cylindrical side walls 46 adapted to loosely fit within the inner walls of the barrel 1 and serving to guide the piston through the bore of the barrel, and to limit any tendency toward tilting, or so-called kipping, of the piston, which, if present, would reduce the freedom of movement otherwise had by the piston within the barrel.

The piston thus described is reciprocable within the barrel 1, but I do not provide any direct means of reciprocating such piston, such as a handle adapted to manually operate the piston, or a spring to propel such piston, nor do I provide means for supplying a positive fluid pressure from a pump or equivalent mechanism, relying, as will be later described, upon the effect of a vacuum, so-called.

Having now described the different parts of the specific embodiment of my invention herein illustrated, I will now describe the operation of the gun when used to dispense a lubricant, such as grease, through a bearing nipple, such as the nipple 17.

Prior to the use of the gun the reservoir chamber 50 is filled with lubricant by dissociating the barrel 1 from the head 6 by unscrewing the head and barrel from one another, the parts being separated at the threads 5, normally joining such parts, for the purpose of loading the barrel. In loading the barrel all of the space comprising the chamber 50 is filled with lubricant, and the piston or movable wall is forced to its rearmost position, wherein the piston end wall or washer 41 comes into contact with the cover 2, the air within the barrel to the rear of the piston being forced out through the orifice 51.

Also, at the same time it is understood that the other interior chambers of the gun, such as the chamber within the head 6 and the bridge 30, and the chamber within the tube 11, have been previously filled with grease or oil. This is preferably done by the manufacturer of the gun, before the gun is put into the hands of a user, this being accomplished by the manufacturer in any suitable way, as by applying grease or oil under pressure to barrel to the rear end of the head 6, and forcing it through the vention without any preliminary non-lubricant discharging operations by the user.

The barrel 1 and the head 6 being thus charged with grease and re-united by the screw threads 5, the operator grasping the gun by the handle 3 will place the spherical contact face 15 of the nozzle in contact with the rim 16 of the nipple 17, the reduced end of the nipple being guided into engagement with such contact face by the flared guide surfaces 14 extending outwardly from the spherical contact face. The operator will then press on the handle forwardly towards the nipple, causing the head 6 to telescope over the tube 11, and at the same time causing the cylindrical plunger 35 to be pressed forwardly within the guide 27 of the tube 11 by the engagement of the bottom wall 32 of the bridge 30 with the rear enlarged face of such plunger. The plunger will, therefore, be advanced forwardly past the port 26 of the tube 11, closing such port and trapping lubricant contained within the tube 11 and, the operation being continued, the plunger 35 forced within the chamber 52 of the tube 11, will displace the lubricant contained within such chamber, forcibly ejecting it under great pressure past the ball valve 23—22, and through the nozzle orifice 21, such discharged lubricant entering the passage 20 of the nipple and past the ball valve 54 of the nipple to the bearing surfaces to be lubricated. A leak proof connection is maintained between the rim or edge 16 of the nipple contact face and the spherical contact face of the nozzle by the manual pressure exerted toward the nipple upon the handle. This is true, even though the angle from which the nozzle is presented to the nipple is varied widely, the nipple circular edge making a tight joint with the nozzle spherical face 15 in all cases, so long as they are pressed together, and when so pressed together complete a closed conduit or passage-way for lubricant under high pressure passing from the gun nozzle to the interior of the nipple. Although I have described my invention in connection with a gun wherein the nozzle is rigidly secured to the reservoir, I may sometimes employ the means of my invention, broadly considered, in a form of gun wherein the nozzle is placed at the end of a flexible tube leading to the gun reservoir.

The very desirable result of securing a manually maintained lubricant leak-proof connection between the nozzle and the nip-

loosely fit within the inner walls of the barrel 1 and serving to guide the piston through the bore of the barrel, and to limit any tendency toward tilting, or so-called kipping, of the piston, which, if present, would reduce the freedom of movement otherwise had by the piston within the barrel.

The piston thus described is reciprocable within the barrel 1, but I do not provide any direct means of reciprocating such piston, such as a handle adapted to manually operate the piston, or a spring to propel such piston, nor do I provide means for supplying a positive fluid pressure from a pump or equivalent mechanism, relying, as will be later described, upon the effect of a vacuum, so-called.

Having now described the different parts of the specific embodiment of my invention herein illustrated, I will now describe the operation of the gun when used to dispense a lubricant, such as grease, through a bearing nipple, such as the nipple 17.

Prior to the use of the gun the reservoir chamber 50 is filled with lubricant by dissociating the barrel 1 from the head 6 by unscrewing the head and barrel from one another, the parts being separated at the threads 5, normally joining such parts, for the purpose of loading the barrel. In loading the barrel all of the space comprising the chamber 50 is filled with lubricant, and the piston or movable wall is forced to its rearmost position, wherein the piston end wall or washer 41 comes into contact with the cover 2, the air within the barrel to the rear of the piston being forced out through the orifice 51.

Also, at the same time it is understood that the other interior chambers of the gun, such as the chamber within the head 6 and the bridge 30, and the chamber within the tube 11, have been previously filled with grease or oil. This is preferably done by the manufacturer of the gun, before the gun is put into the hands of a user, this being accomplished by the manufacturer in any suitable way, as by applying grease or oil under pressure to barrel to the rear end of the head 6, and forcing it through the chamber contained within the head, through the orifices 34 and through the port 26, until the chamber within the tube 11 is also filled, and the lubricant begins to come through the orifice 21 of the nozzle 12. This is not a necessary prerequisite, but is preferred as permitting the instantaneous ready use of the lubricating gun of my invention. The rim 16 of the nipple 17, the reduced end of the nipple being guided into engagement with such contact face by the flared guide surfaces 14 extending outwardly from the spherical contact face. The operator will then press on the handle forwardly towards the nipple, causing the head 6 to telescope over the tube 11, and at the same time causing the cylindrical plunger 35 to be pressed forwardly within the guide 27 of the tube 11 by the engagement of the bottom wall 32 of the bridge 30 with the rear enlarged face of such plunger. The plunger will, therefore, be advanced forwardly past the port 26 of the tube 11, closing such port and trapping lubricant contained within the tube 11 and, the operation being continued, the plunger 35 forced within the chamber 52 of the tube 11, will displace the lubricant contained within such chamber, forcibly ejecting it under great pressure past the ball valve 23—22, and through the nozzle orifice 21, such discharged lubricant entering the passage 20 of the nipple and past the ball valve 54 of the nipple to the bearing surfaces to be lubricated. A leak proof connection is maintained between the rim or edge 16 of the nipple contact face and the spherical contact face of the nozzle by the manual pressure exerted toward the nipple upon the handle. This is true, even though the angle from which the nozzle is presented to the nipple is varied widely, the nipple circular edge making a tight joint with the nozzle spherical face 15 in all cases, so long as they are pressed together, and when so pressed together complete a closed conduit or passage-way for lubricant under high pressure passing from the gun nozzle to the interior of the nipple. Although I have described my invention in connection with a gun wherein the nozzle is rigidly secured to the reservoir, I may sometimes employ the means of my invention, broadly considered, in a form of gun wherein the nozzle is placed at the end of a flexible tube leading to the gun reservoir.

The very desirable result of securing a manually maintained lubricant leak-proof connection between the nozzle and the nipple even when the gun is pressed from different angular directions toward the nipple, is very valuable as when the gun is used to lubricate nipples such as those herein illustrated placed adjacent the surfaces of machine bearings on an automobile where the space is oftentimes limited in which the gun can be operated, and intervening portions

of the automobile prevent direct axial alignment of the gun and nipple, or, at any rate, make it awkward to so position the gun relative to the nipple. In my present invention I secure this result and at the same time utilize the connection creating pressure to force lubricant from the gun through the leak-proof joint thus secured by pressure and I secure the ejection of the lubricant under a very high pressure at the same time, and with the same manual effort as the tight leak-proof connection is secured. I thus have provided a one-hand lubricant gun capable of being used for oil or grease or other lubricant, or for any liquid or fluid substance sought to be ejected from a reservoir to a receptacle which may comprise an inlet nipple.

Referring now particularly to Fig. 3 of the drawings, in this figure the nozzle is shown as being presented at an angle to the axis of the nipple and a leak-proof connection is shown as being secured between the peripheral edge of the contact face of the nipple and the spherical concave face of the nozzle, to form a closed leak-proof passage way between the end closed nozzle orifice and the nipple orifice. By comparing the relation of the parts as indicated in Fig. 3, with the same parts as shown in Figs. 1 and 2, it will be seen that the same kind of a connection is secured and the lubricant may be ejected from the nozzle to the nipple in the same way by manual pressure exerted against the gun towards the nipple.

In Fig. 4 I show a modified form of nozzle end and nipple wherein the nozzle instead of having a concave contact face, spherically formed, terminates in a ball 61, having its forward portion convex spherically formed, the convexly rounded end of the nozzle fitting within the circular inner rim 62 of a nipple annular contact face 63, and making a leak-proof connection between the circular rim of the nipple contact face, and the convexly rounded contact face of the nozzle.

Fig. 5 shows another view of a similar nozzle and nipple to that illustrated in Fig. 4 modified, however, in that the nipple 64 is shown as comprising an outwardly flaring guide portion 66 like, in this respect, to the nozzles of Figs. 1 to 3 inclusive, and like them serving to guide the face 67 of the nozzle to the contact face 68 of the nipple of my invention wherein the nozzle and nipple contact faces are reversely formed from those shown in Figs. 1 to 3 inclusive, the nozzle 69 having a flat contact face 71 with a circular knife edge rim and the nipple 70 having a concave face 73 spherically formed and adapted to receive the nozzle end, and the parts being guided to lubricant dispensing leak proof connecting position by an outwardly flared guiding surface 74 surrounding the concave contact face of the nipple.

Having described my invention in connection with a particular kind of lubricant dispensing gun, I am aware that my improved nozzle and nipple connection may be embodied in structures varying widely from that herein illustrated and described, and when used in connection with a gun such as a lubricant gun, the construction of the gun may likewise be varied. In my co-pending application Serial No. 602,465, filed November 21, 1922, likewise I show a different form of gun and a number of different kinds of nozzles and nipples embodying the principles of my invention, and in my co-pending application Serial No. 602,466 filed November 21, 1922, I show still another form of gun together with a nozzle and nipple used in connection therewith employing the principles of my invention. I elect to claim in this application my invention comprising a nozzle and a nipple and the parts associated therewith broadly, and to claim herein more specifically that construction of nozzle and nipple wherein the nozzle has a concave contact face adapted to receive the nipple end, and to claim in other co-pending applications other forms of apparatus embodying the broad principles of my invention herein disclosed.

After a charge of lubricant of a volume at least equal to the volume of space occupied by the plunger piston 35, disposed forwardly of the port 26, has been discharged from the gun, the operator will release the forwardly direct pressure on the handle and the spring 37, which, during such operation, was pressed as shown in Fig. 2, will cause the piston and nozzle to regain their normal extended positions, as shown in Fig. 1, the spring 37 being strong enough to accomplish this over the power of a so-called vacuum created in the chamber 52 when the plunger 35 is removed therefrom, and the

thus utilize the connection creating pressure to force lubricant from the gun through the leak-proof joint thus secured by pressure and I secure the ejection of the lubricant under a very high pressure at the same time, and with the same manual effort as the tight leak-proof connection is secured. I thus have provided a one-hand lubricant gun capable of being used for oil or grease or other lubricant, or for any liquid or fluid substance sought to be ejected from a reservoir to a receptacle which may comprise an inlet nipple.

Referring now particularly to Fig. 3 of the drawings, in this figure the nozzle is shown as being presented at an angle to the axis of the nipple and a leak-proof connection is shown as being secured between the peripheral edge of the contact face of the nipple and the spherical concave face of the nozzle, to form a closed leak-proof passageway between the end closed nozzle orifice and the nipple orifice. By comparing the relation of the parts as indicated in Fig. 3, with the same parts as shown in Figs. 1 and 2, it will be seen that the same kind of a connection is secured and the lubricant may be ejected from the nozzle to the nipple in the same way by manual pressure exerted against the gun towards the nipple.

In Fig. 4 I show a modified form of nozzle end and nipple wherein the nozzle instead of having a concave contact face, spherically formed, terminates in a ball 61, having its forward portion convex spherically formed, the convexly rounded end of the nozzle fitting within the circular inner rim 62 of a nipple annular contact face 63, and making a leak-proof connection between the circular rim of the nipple contact face, and the convexly rounded contact face of the nozzle.

Fig. 5 shows another view of a similar nozzle and nipple to that illustrated in Fig. 4 modified, however, in that the nipple 64 is shown as comprising an outwardly flaring guide portion 66 like, in this respect, to the nozzles of Figs. 1 to 3 inclusive, and like them serving to guide the face 67 of the nozzle to the apertured contact edge 68 of the nipple. Also in this figure, the nozzle is presented against the nipple from a different angular direction than in axial alignment therewith, but serving to maintain, just as when in axial alignment, a tight lubricant proof connection between the nozzle and the nipple when pressure is directed by the user to force the gun against the nozzle.

In Fig. 6 I show another embodiment of the nipple 70 having a concave face 73 spherically formed and adapted to receive the nozzle end, and the parts being guided to lubricant dispensing leak proof connecting position by an outwardly flared guiding surface 74 surrounding the concave contact face of the nipple.

Having described my invention in connection with a particular kind of lubricant dispensing gun, I am aware that my improved nozzle and nipple connection may be embodied in structures varying widely from that herein illustrated and described, and when used in connection with a gun such as a lubricant gun, the construction of the gun may likewise be varied. In my co-pending application Serial No. 602,465, filed November 21, 1922, likewise I show a different form of gun and a number of different kinds of nozzles and nipples embodying the principles of my invention, and in my co-pending application Serial No. 602,466 filed November 21, 1922, I show still another form of gun together with a nozzle and nipple used in connection therewith employing the principles of my invention. I elect to claim in this application my invention comprising a nozzle and a nipple and the parts associated therewith broadly, and to claim herein more specifically that construction of nozzle and nipple wherein the nozzle has a concave contact face adapted to receive the nipple end, and to claim in other co-pending applications other forms of apparatus embodying the broad principles of my invention herein disclosed.

After a charge of lubricant of a volume at least equal to the volume of space occupied by the plunger piston 35, disposed forwardly of the port 26, has been discharged from the gun, the operator will release the forwardly direct pressure on the handle and the spring 37, which, during such operation, was pressed as shown in Fig. 2, will cause the piston and nozzle to regain their normal extended positions, as shown in Fig. 1, the spring 37 being strong enough to accomplish this over the power of a so-called vacuum created in the chamber 52 when the plunger 35 is removed therefrom, and the ball valve 22 and 23 during such removal being tightly closed.

At the moment the port 26 is again uncovered by the retractile action of the spring 37 upon the piston 35 the power of this vacuum will be communicated to the grease within the head 6, and which body of lubricant is continuous through the openings 34 of the bridge 30 through the chamber 50 of the barrel 1 to the piston comprising

the parts 40, 41 and 42, and the entire body of lubricant will be drawn forwardly, together with the large piston follower or so-called movable wall 40—41—42, and the tube 11 will be immediately recharged with lubricant.

Although I have described the foregoing operation whereby the lubricant together with the follower or movable wall is drawn forwardly in the barrel 1 after a discharging operation, by referring to the so-called vacuum as drawing the lubricant and piston forward so that a new charge of lubricant is drawn into the chamber 52 for a subsequent discharging operation of the gun as described, I believe that another way of describing the operation relative to the recharging of the chamber 52 would be to state that lubricant together with the piston follower or movable wall is pressed forward by atmospheric pressure acting on its rear side, as through the opening 51, this atmospheric pressure being in excess of the hydraulic pressure existing on the forward portion of the lubricant when the piston 35 has been withdrawn from the chamber 52, such withdrawal causing a consequent reduction in hydraulic pressure on the forward side of the said lubricant.

But in any event I find that the said follower always is in contact with the body of lubricant ahead of it, and the lubricant is forced forwardly into the chamber 52 after every discharge operation, as described.

By referring now to the different embodiments of my invention illustrated, it will be observed that the lubricant conducting connection between the lubricant gun nozzle and the element to be lubricated comprises a contact face for the nozzle and a contact face for the element, the two contact faces being adapted to be pressed together such as by manual pressure directed from the gun toward the element, one of the said contact-faces having a spherical surface, and the other contact face comprising an edge which is circular and is preferably very narrow, to form a very thin annular surface against which the spherical surface is pressed. In the different figures of drawing I have shown this very narrow annular surface as being formed on substantially the same radius of curvature as that of the said spheri- forming a part hereof, that I used it in the sense of its being circular or substantially so, or so as to accomplish the same results as a circular face edge, in substantially the same way.

I find that by so forming the contacting portions of the nozzle and the element to be lubricated, that a great sealing pressure can be exerted between the contacting portions of the nozzle and the element in excess of the hydraulic pressure exerted by the lubricant enclosed by such portions so as to effectually retain the lubricant in the passageway thus formed, and I find that this can be most effectually accomplished by the novel means I have herein provided, and which comprise generally the contacting faces I have herein described.

My invention contemplates, moreover, the provision of contact faces for a lubricant gun nozzle, and a lubricant receiving element which have their engaging portions formed of hard material such as metal, and I prefer to use steel for the material having such surfaces, as by the use of such hard material, I secure a permanence of the contact surfaces which cannot otherwise be secured due to the durability of the material and I secure an increased degree of efficiency since the contacting portions are unyielding as would be the case were they formed of rubber or like material.

By the construction of a temporary joint between the gun nozzle and lubricant receptacle, as has been described, the end of the nozzle is adapted to be fitted to the contact face of the receptacle and to make a pressure maintained, substantially line contact therewith without forcing dirt which may accumulate on the exterior of the receptacle, into the interior passages thereof and making a lubricant proof joint, the preferable metal-to-metal contact substantially on a circular line causing a cutting through of the accumulated dirt.

Also especially in those forms of my invention having a very small inlet opening leading into the interior of the receptacle the liability of any considerable amount of dirt being forced into the receptacle is minimized. By providing such a metal-to-metal joint between the nozzle and the nipple, such dirt will be excluded from the joint which is not the case where a pressure joint is estab-

Although I have described the foregoing operation whereby the lubricant together with the follower or movable wall is drawn forwardly in the barrel 1 after a discharging operation, by referring to the so-called vacuum as drawing the lubricant and piston forward so that a new charge of lubricant is drawn into the chamber 52 for a subsequent discharging operation of the gun as described, I believe that another way of describing the operation relative to the recharging of the chamber 52 would be to state that lubricant together with the piston follower or movable wall is pressed forward by atmospheric pressure acting on its rear side, as through the opening 51, this atmospheric pressure being in excess of the hydraulic pressure existing on the forward portion of the lubricant when the piston 35 has been withdrawn from the chamber 52, such withdrawal causing a consequent reduction in hydraulic pressure on the forward side of the said lubricant.

But in any event I find that the said follower always is in contact with the body of lubricant ahead of it, and the lubricant is forced forwardly into the chamber 52 after every discharge operation, as described.

By referring now to the different embodiments of my invention illustrated, it will be observed that the lubricant conducting connection between the lubricant gun nozzle and the element to be lubricated comprises a contact face for the nozzle and a contact face for the element, the two contact faces being adapted to be pressed together such as by manual pressure directed from the gun toward the element, one of the said contact-faces having a spherical surface, and the other contact face comprising an edge which is circular and is preferably very narrow, to form a very thin annular surface against which the spherical surface is pressed. In the different figures of drawing I have shown this very narrow annular surface as being formed on substantially the same radius of curvature as that of the said spherical surface, but the area of the annular contact surface in all cases where the annular surface or so-called edge, is placed on the nozzle or on the element to be lubricated, is of reduced area so as to intensify the lubricant sealing pressure exerted against such reduced surface.

I wish it to be understood also that where I have used the term "annular" in the claims and accompanying this specification and portions of the nozzle and be lubricated, that a great sealing pressure can be exerted between the contacting portions of the nozzle and the element in excess of the hydraulic pressure exerted by the lubricant enclosed by such portions so as to effectually retain the lubricant in the passageway thus formed, and I find that this can be most effectually accomplished by the novel means I have herein provided, and which comprise generally the contacting faces I have herein described.

My invention contemplates, moreover, the provision of contact faces for a lubricant gun nozzle, and a lubricant receiving element which have their engaging portions formed of hard material such as metal, and I prefer to use steel for the material having such surfaces, as by the use of such hard material, I secure a permanence of the contact surfaces which cannot otherwise be secured due to the durability of the material and I secure an increased degree of efficiency since the contacting portions are unyielding as would be the case were they formed of rubber or like material.

By the construction of a temporary joint between the gun nozzle and lubricant receptacle, as has been described, the end of the nozzle is adapted to be fitted to the contact face of the receptacle and to make a pressure maintained, substantially line contact therewith without forcing dirt which may accumulate on the exterior of the receptacle, into the interior passages thereof and making a lubricant proof joint, the preferable metal-to-metal contact substantially on a circular line causing a cutting through of the accumulated dirt.

Also especially in those forms of my invention having a very small inlet opening leading into the interior of the receptacle the liability of any considerable amount of dirt being forced into the receptacle is minimized. By providing such a metal-to-metal joint between the nozzle and the nipple, such dirt will be excluded from the joint which is not the case where a pressure joint is established between contacting portions of rubber or other gasket material.

This case is a division as to the subject matter claimed herein, of an earlier application, Serial Number 602,465, filed November 21, 1922.

Having thus described my invention in a number of embodiments, I am aware that numerous and extensive departures may be made from the embodiments herein illus-

trated, described and referred to, but without departing from the spirit of my invention.

I claim:—

1. In a lubricating apparatus, the combination with a lubricant receptacle element of a lubricant reservoir for supplying lubricant thereto, means to put the lubricant in the reservoir under pressure, a lubricant feeding nozzle element, said reservoir communicating lubricant under pressure thereto, said receptacle element and said nozzle element having cooperative substantially non-compressible contact faces and openings therethrough, one of said contact faces having a concavely spherical surface, the other contact face having a dirt cutting circumferential edge portion adapted to be embraced within the spherical surface of the other face and providing a solid contact therewith when the nozzle is pressed against the receptacle element from any one of a plurality of angularly different directions, to make a sealed, substantially non-yielding, lubricant conducting, connection between the face openings.

2. In a lubricating apparatus, the combination with a lubricant receptacle element of a lubricant reservoir for supplying lubricant thereto, means to put the lubricant in the reservoir under pressure, a lubricant feeding nozzle element, said reservoir communicating lubricant under pressure thereto, said receptacle element and said nozzle element having cooperative substantially non-compressible contact faces and openings therethrough, the nozzle contact face having a concavely spherical surface, the other contact face having a dirt cutting circumferential edge portion adapted to be embraced within the spherical surface of the nozzle face and providing the sole contact therewith when the nozzle is pressed against the receptacle element from any one of a plurality of angularly different directions, to make a sealed, substantially non-yielding, lubricant conducting connection between the face openings.

3. In a lubricating apparatus, the combination with a lubricant receptacle element of a lubricant gun for supplying lubricant under pressure thereto, said receptacle element having a concavely spherical surface, a lubricant feeding nozzle element having a dirt cutting circumferential edge portion adapted to be embraced within the spherical surface of the receptacle element and providing a solid contact therewith when the nozzle is pressed against the receptacle element from any one of a plurality of angularly different directions, to make a sealed, substantially non-yielding lubricant conducting connection between the face openings, and an outwardly inclined guide for one of said elements to direct the other element contact face portion thereto.

4. In a lubricating system, the combination with a lubricant dispensing gun having a lubricant feeding nozzle, of a lubricant receiving element, said gun comprising means to supply lubricant under pressure to said element, the nozzle and said element having cooperating substantially non-compressible contact faces with communicating openings therethrough, one of said contact faces having a spherical surface, and the other contact face comprising an annular dirt cutting edge portion adapted to fit entirely within the border of the spherical surface of the other face and to swivel thereagainst forming a tight connection between said openings for the conduction of lubricant under pressure from said gun to the receiving element when said nozzle face is pressed against the said element from any one of a plurality of angularly different directions, after their faces are placed in contacting engagement.

5. In a lubricating apparatus, the combination with a lubricant receptacle of a lubricant gun comprising a container and a rigid lubricant feeding nozzle secured directly thereto, said receptacle and said gun nozzle having cooperative substantially non-compressible contact faces and openings therethrough, the nozzle contact face having a concavely spherical surface, the receptacle contact face adapted to be received within and to engage the concave spherical surface of the nozzle face and having a dirt-cutting circumferential edge portion providing the sole contact therewith, when the gun is directed against the receptacle and manual pressure exerted against the container from any one of a plurality of angularly different directions, to make and manually maintain a sealed, substantially non-yielding, lubricant conducting swiveling connection between the face openings.

6. In a lubricating system, the combination with a lubricant dispensing gun having a lubricant feeding nozzle, of a lubricant

the reservoir under pressure, a lubricant feeding nozzle element, said reservoir communicating lubricant under pressure thereto, said receptacle element and said nozzle element having cooperative substantially non-compressible contact faces and openings therethrough, one of said contact faces having a concavely spherical surface, the other contact face having a dirt cutting circumferential edge portion adapted to be embraced within the spherical surface of the other face and providing a solid contact therewith when the nozzle is pressed against the receptacle element from any one of a plurality of angularly different directions, to make a sealed, substantially non-yielding, lubricant conducting, connection between the face openings.

2. In a lubricating apparatus, the combination with a lubricant receptacle element of a lubricant reservoir for supplying lubricant thereto, means to put the lubricant in the reservoir under pressure, a lubricant feeding nozzle element, said reservoir communicating lubricant under pressure thereto, said receptacle element and said nozzle element having cooperative substantially non-compressible contact faces and openings therethrough, the nozzle contact face having a concavely spherical surface, the other contact face having a dirt cutting circumferential edge portion adapted to be embraced within the spherical surface of the nozzle face and providing the sole contact therewith when the nozzle is pressed against the receptacle element from any one of a plurality of angularly different directions, to make a sealed, substantially non-yielding, lubricant conducting connection between the face openings.

3. In a lubricating apparatus, the combination with a lubricant receptacle element of a lubricant gun for supplying lubricant under pressure thereto, said gun having a lubricant feeding nozzle element, said receptacle element and said nozzle element having cooperative substantially non-compressible contact faces and openings therethrough, one of said contact faces having a concavely spherical surface, the other contact face having a dirt cutting circumferential edge portion adapted to be embraced within the spherical surface of the other face and providing the sole contact therewith when the nozzle is pressed against the receptacle element from any one of a plurality of angularly different directions, to make a sealed, substantially non-yielding, lubricant conducting connection between the face openings.

4. In a lubricating apparatus, the combination with a lubricant dispensing gun having a lubricant feeding nozzle, of a lubricant receiving element, said gun comprising means to supply lubricant under pressure to said element, the nozzle and said element having cooperating substantially non-compressible contact faces with communicating openings therethrough, one of said contact faces having a spherical surface, and the other contact face comprising an annular dirt cutting edge portion adapted to fit entirely within the border of the spherical surface of the other face and to swivel thereagainst forming a tight connection between said openings for the conduction of lubricant under pressure from said gun to the receiving element when said nozzle face is pressed against the said element from any one of a plurality of angularly different directions, after their faces are placed in contacting engagement.

5. In a lubricating apparatus, the combination with a lubricant receptacle of a lubricant gun comprising a container and a rigid lubricant feeding nozzle secured directly thereto, said receptacle and said gun nozzle having cooperative substantially non-compressible contact faces and openings therethrough, the nozzle contact face having a concavely spherical surface, the receptacle contact face adapted to be received within and to engage the concave spherical surface of the nozzle face and having a dirt-cutting circumferential edge portion providing the sole contact therewith, when the gun is directed against the receptacle and manual pressure exerted against the container from any one of a plurality of angularly different directions, to make and manually maintain a sealed, substantially non-yielding, lubricant conducting swiveling connection between the face openings.

6. In a lubricating system, the combination with a lubricant dispensing gun having a lubricant feeding nozzle, of a lubricant receiving element, said gun comprising means to supply lubricant under pressure to said element, the nozzle and said element having cooperating substantially non-compressible contact faces with communicating openings therethrough, one of said contact faces having a spherical surface, and the other contact face comprising an annular dirt cutting edge portion adapted to fit entirely within the border of the spherical surface of the other face and to swivel thereagainst forming a tight connection between said openings for the conduction of lubricant

under pressure from said gun to the receiving element when said nozzle face is pressed against the said element from any one of a plurality of angularly different directions, after their faces are placed in contacting engagement, and an outwardly inclined guide for one of said elements to direct the other element contact face thereto.

7. In a lubricating system, the combination with a lubricant dispensing gun having a lubricant feeding nozzle, of a lubricant receiving element, said gun comprising means to supply lubricant under pressure to said element, the nozzle and said element having cooperating substantially non-compressible contact faces with communicating openings therethrough, one of said contact faces having a spherical surface, and the other contact face comprising an annular contacting portion, said nozzle face being concave, the nipple face adapted to fit entirely within the border of the concave nozzle face and to swivel thereagainst forming a tight dirt cutting connection between said openings for the conduction of lubricant under pressure from said gun to the receiving element when said nozzle face is pressed against the said element from any one of a plurality of angularly different directions, after their faces are placed in contacting engagement.

In testimony whereof I hereunto affix my signature this 1st day of August, 1923.

OSCAR ZERK.

P. B. LASKEY & W. ARNOLD.

Axle Lubricator.

No. 242,141. Patented May 31, 1881.

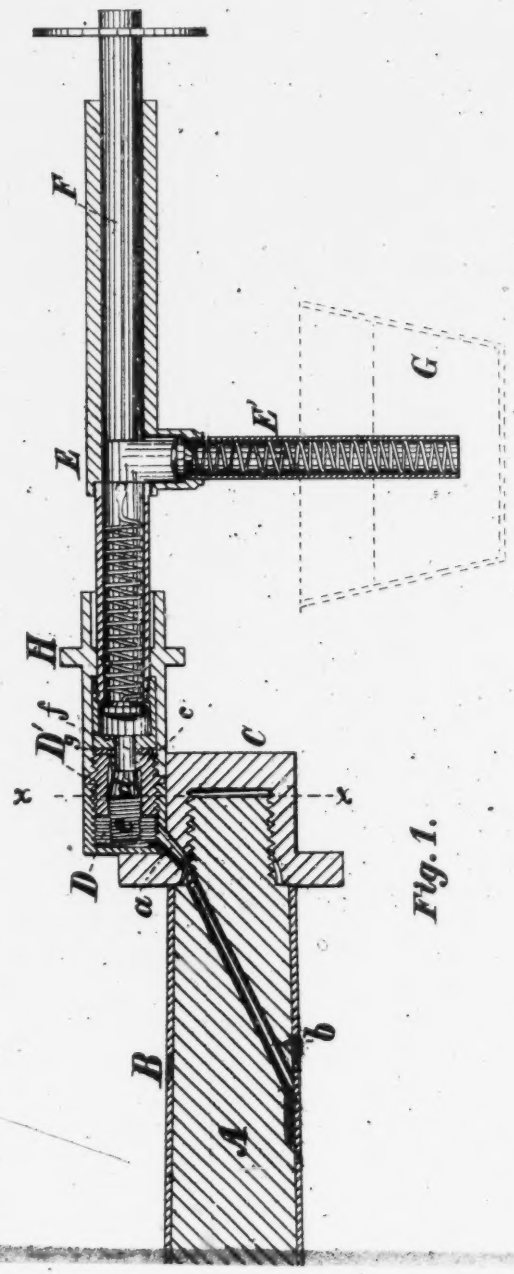

Fig. 1.

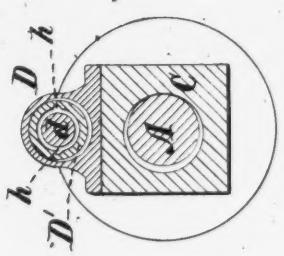

Fig. 2.

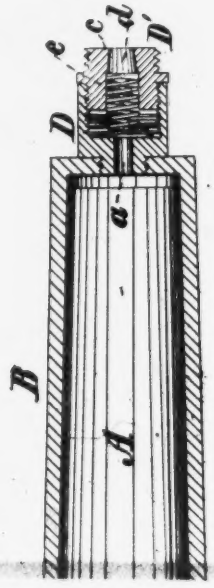

Fig. 3.

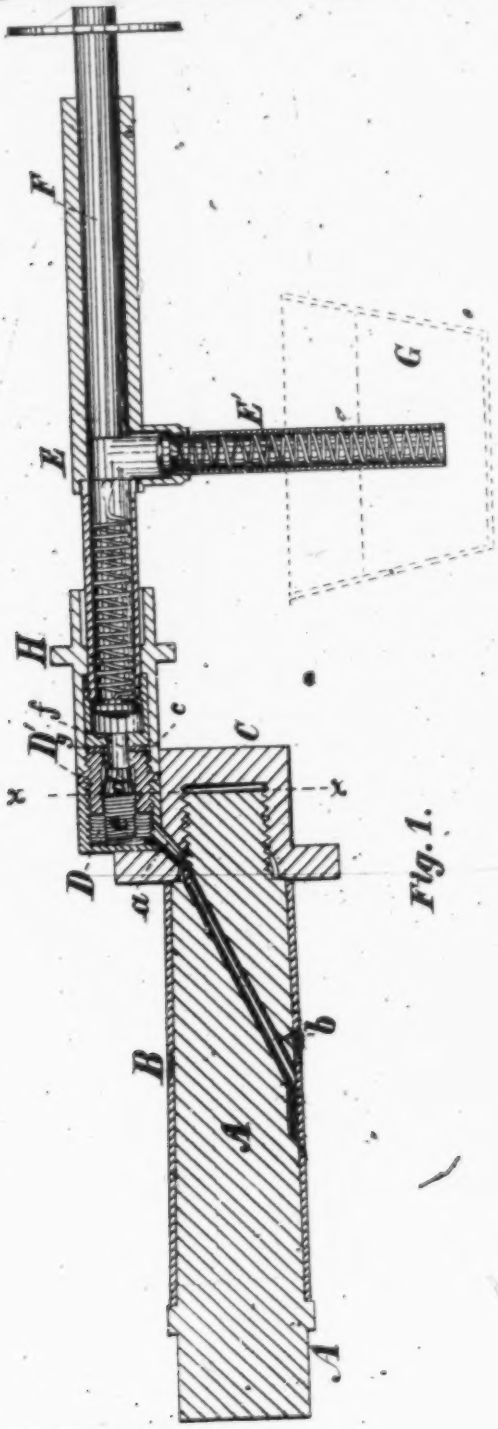

Fig. 1.

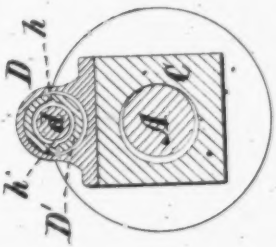

Fig. 2.

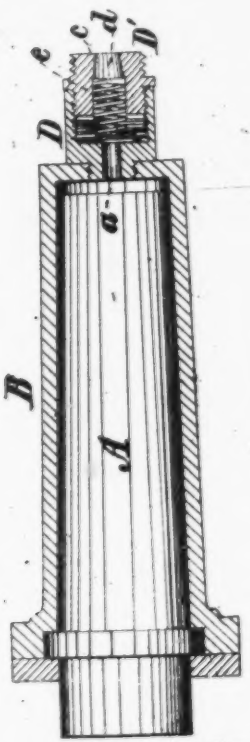

Fig. 3.

Witnesses:
W. E. Lombard.
C. H. Dodd.

Inventors:
Philip B. Laskey,
William Arnold.
by N. G. Lombard.
Attorney.

UNITED STATES PATENT OFFICE.

PHILIP B. LASKEY AND WILLIAM ARNOLD, OF MARBLEHEAD, MASS.

AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 242,141, dated May 31, 1881.

Application filed November 1, 1879.

To all whom it may concern:

Be it known that we, PHILIP B. LASKEY and WILLIAM ARNOLD, both of Marblehead, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Oiling Carriage-Axles, of which the following, taken in connection with the accompanying drawings, is a specification.

Our invention relates to improvements in oiling carriage-axles, whereby such axles may be successfully oiled without removing the wheel or even the holding-nut from the axles; and it consists in the combination, with the axle of a carriage and its box, of an oil-chamber attached to said axle or wheel and communicating with the interior of said box by a suitable passage or conduit, and provided with a supply-orifice having an inwardly-opening and self-closing valve, a force-pump or injector provided with a nozzle adapted to fit said supply-orifice and retract its valve, and a coupling adapted to firmly secure said pump or injector to said oil-chamber during the operation of oiling the wheel.

Figure 1 of the drawings is a central longitudinal section through a wheel-box, a portion of its axle and a force-pump applied thereto and illustrating our invention. Fig. 2 is a vertical transverse section on line *x x* on Fig. 1, and Fig. 3 is a longitudinal central section through a carriage-box, illustrating the manner of applying our invention to a wheel having a box closed at its outer end and secured to the axle by means of a collar upon its inner end.

In Fig. 1, A is the axle and B the hub-box, secured in position on the axle by the nut C in a well-known manner.

To the upper side of the nut C is firmly secured the chamber D, which is provided with a screw-cap, D′, for filling it with oil. The chamber D has screwed into its front or outer end a thimble, D′, through the center of which is made the supply-orifice *c*, larger at its inner end than at its outer end, and having fitted thereto the tapering plug-valve *d*, behind which is the spiral spring *e*, which acts to hold said valve upon its seat to close said supply-orifice.

E is a pump-cylinder, having fitted thereto the piston F, and provided with a suction-pipe, E′, adapted to reach the oil in a vessel, G, (shown in dotted lines,) and with inlet and outlet valves constructed and arranged in any well-known manner. The discharge end of the pump-cylinder is provided with a short pipe or discharge-nozzle, *f*, adapted to enter the supply-orifice *c* and push back the valve *d*, and has fitted thereon, so as to bear against the end of the pump-cylinder, a washer, *g*, of leather, rubber, or other suitable packing material, whereby the joint between the pump-cylinder and the oil-chamber is made tight when the pump is pressed hard against said chamber, and the valve *d* is pressed inward to permit oil to be forced into the chamber and through it and the conduits *a* and *b* into the space between the box B and the axle A.

H is a coupling-sleeve surrounding the pump-cylinder, and adapted to be screwed upon the male thread formed upon the exterior of the thimble D′, as shown, to secure the pump firmly to the chamber, if desired. The interior of the inner end of the thimble D′ has formed therein one or more grooves, *h*, through which oil forced from the pump, may pass around the valve *d* when said valve is forced back by applying the pump thereto, as shown in Fig. 2.

In Fig. 3 is shown a modification illustrating our invention as applied to a wheel-box

AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 242,141, dated May 31, 1881.

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Be it known that we, PHILIP B. LASKEY and WILLIAM ARNOLD, both of Marblehead, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Oiling Carriage-Axles, of which the following, taken in connection with the accompanying drawings, is a specification.

Our invention relates to improvements in oiling carriage-axles, whereby such axles may be successfully oiled without removing the wheel or even the holding-nut from the axles; and it consists in the combination, with the axle of a carriage and its box, of an oil-chamber attached to said axle or wheel and communicating with the interior of said box by a suitable passage or conduit, and provided with a supply-orifice having an inwardly-opening and self-closing valve, a force-pump or injector provided with a nozzle adapted to fit said supply-orifice and retract its valve, and a coupling adapted to firmly secure said pump or injector to said oil-chamber during the operation of oiling the wheel.

Figure 1 of the drawings is a central longitudinal section through a wheel-box, a portion of its axle and a force-pump applied thereto and illustrating our invention. Fig. 2 is a vertical transverse section on line *x x* on Fig. 1, and Fig. 3 is a longitudinal central section through a carriage-box, illustrating the manner of applying our invention to a wheel having a box closed at its outer end and secured to the axle by means of a collar upon its inner end.

In Fig. 1, A is the axle and B the hub-box, secured in position on the axle by the nut C in a well-known manner.

To the upper side of the nut C is firmly secured the oil-chamber D, communicating through the hole *a*, made through said nut, and the conduit *b*, made obliquely through the axle A, from its nut-bearing shoulder downward to a point upon the outside of said axle at or near the middle of the length of its bearing-surface within the hub-box.

For new carriages the chamber D may be made in one piece with the nut C, but in altering old carriages it is preferable to construct the chamber separately and attach it to the nut by the well-known process called "sweating."

The chamber D has screwed into its front or outer end a thimble, D′, through the center of which is made the supply-orifice *c*, larger at its inner end than at its outer end, and having fitted thereto the tapering plug-valve *d*, behind which is the spiral spring *e*, which acts to hold said valve upon its seat to close said supply-orifice.

E is a pump-cylinder, having fitted thereto the piston F, and provided with a suction-pipe, E′, adapted to reach the oil in a vessel, G, (shown in dotted lines,) and with inlet and outlet valves constructed and arranged in any well-known manner. The discharge end of the pump-cylinder is provided with a short pipe or discharge-nozzle, *f*, adapted to enter the supply-orifice *c* and push back the valve *d*, and has fitted thereon, so as to bear against the end of the pump-cylinder, a washer, *g*, of leather, rubber, or other suitable packing material, whereby the joint between the pump-cylinder and the oil-chamber is made tight when the pump is pressed hard against said chamber, and the valve *d* is pressed inward to permit oil to be forced into the chamber and through it and the conduits *a* and *b* into the space between the box B and the axle A.

H is a coupling-sleeve surrounding the pump-cylinder, and adapted to be screwed upon the male thread formed upon the exterior of the thimble D′, as shown, to secure the pump firmly to the chamber, if desired. The interior of the inner end of the thimble D′ has formed therein one or more grooves, *h*, through which oil forced from the pump, may pass around the valve *d* when said valve is forced back by applying the pump thereto, as shown in Fig. 2.

In Fig. 3 is shown a modification illustrating our invention as applied to a wheel-box that is secured to its axle by means of a collar upon its inner end, in which A is the axle, B the box, and D the oil-chamber screwed into the center of the outer end of the box, as shown, the oil-chamber in all other respects being constructed substantially like that shown in Fig. 1, D′ being the thimble, *d* the valve actuated by the spring *e*, and *a* the conduit leading therefrom to the interior of the box B, the pump being applied thereto and operating in connection therewith precisely as heretofore described.

The operation of our invention is as follows:

It being desired to oil a carriage-wheel supplied with our improvements, the suction-pipe E′ is placed in any suitable receptacle containing the required oil to be used, and the piston is drawn out to charge the cylinder with oil, when the discharge-nozzle is pressed against the valve *d* to force it inward till the packing *g* presses hard against the end of the thimble D′, when, if the piston F be forced inward, oil will be forced into the chamber D and through the conduits *a* and *b* into the space between the axle and box, completely filling said space, when, if the pump be removed, the valve *d* closes the orifice *c* and effectually prevents any escape of the oil through said orifice.

In cold weather, when the oil is stiff, or in cases when the oil in the wheel-hub has become gummy or foul from any cause, it is necessary to firmly attach the pump to the oil-chamber by means of the coupling-sleeve H, and the male thread on the outer portion, D′, of the oil-chamber, so as to insure a tight packed joint between the pump and the oil-chamber, when there will no difficulty in forcing the oil into the box around the axle.

What we claim as new, and desire to secure by Letters Patent of the United States, is—

In combination with the axle A and box B, the oil-chamber D, communicating with the interior of said box and provided with a supply-orifice, an inwardly-opening self-acting valve, *d*, and a male screw-thread upon the exterior of its outer portion, a force-pump or injector provided with a discharge-nozzle adapted to enter said supply-orifice and push back the valve *d*, and a coupling-sleeve, H, provided with an internal thread to engage with the thread on the oil-chamber, all arranged and adapted to operate substantially as and for the purposes described.

Executed at Boston, Massachusetts, this 30th day of October, 1879.

PHILIP B. LASKEY.
WILLIAM ARNOLD.

Witnesses:
N. C. LOMBARD,
C. H. DODD.

(Model.)

L. H. SHOLDER.

Hose Coupling.

No. 242,564. Patented June 7, 1881.

Fig 1.

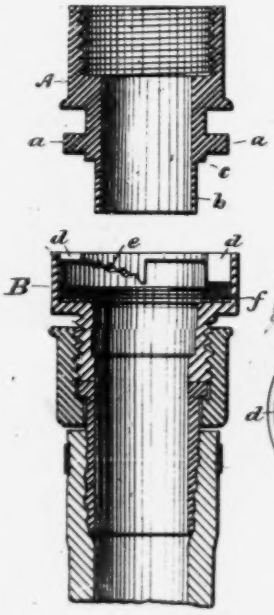


Fig 2.

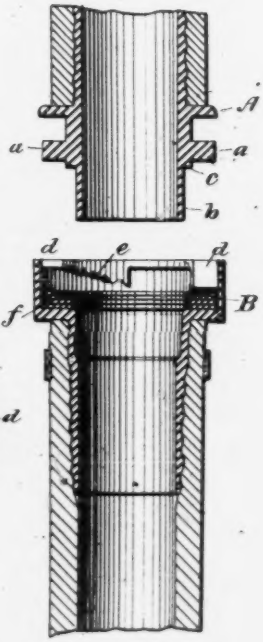


Fig 3.

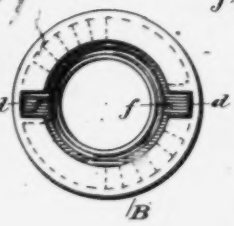


Fig 4.

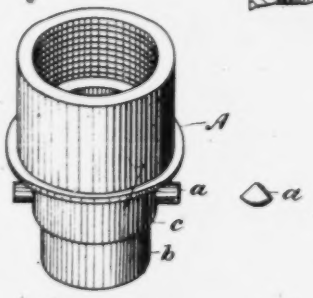
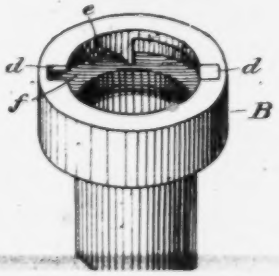


Fig 5.



No. 242,564. Patented June 7, 1881.

Fig. 1.

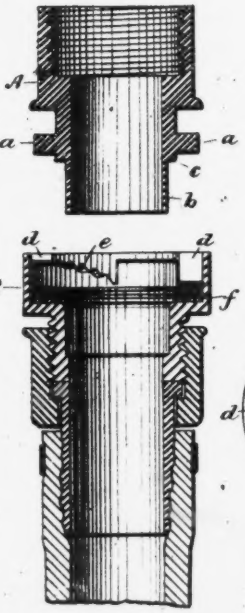


Fig. 2.

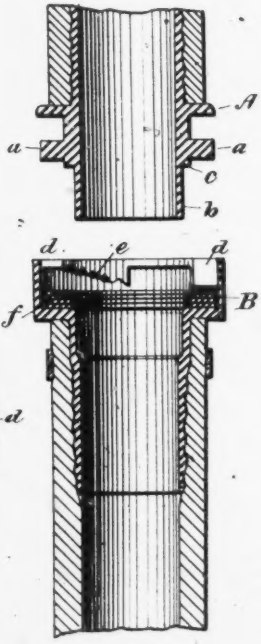


Fig. 3.

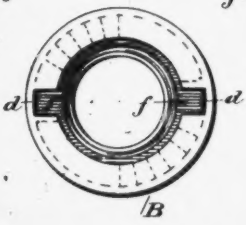


Fig. 4.

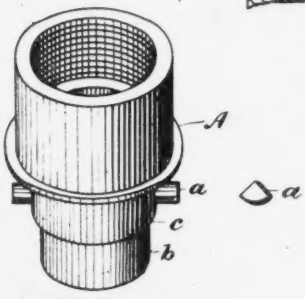
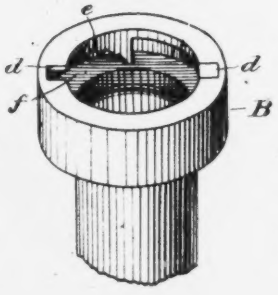


Fig. 5.



WITNESSES

D. Lehman.

W. E. Donnelly

INVENTOR

L. H. Sholder.

By Dewgett & Dewgett.

ATTORNEYS

UNITED STATES PATENT OFFICE.

LOUIS H. SHOLDER, OF CLEVELAND, OHIO.

HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 242,564, dated June 7, 1881.

Application filed February 9, 1881. (Model.)

To all whom it may concern:

Be it known that I, LOUIS H. SHOLDER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Hose-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to hose-couplings; and it consists in so constructing a hose-coupling that it can be manufactured much cheaper and at the same time be just as serviceable in every respect as any of the more expensive ones now in use. It is also much more easily manipulated, and can be coupled in an instant without the use of a wrench or any like tool.

In the drawings, Figure 1 is a longitudinal sectional view of my coupling, having screw-threads formed on the male and female parts to adapt them to be attached to the common screw-coupling now in use. Fig. 2 is a longitudinal sectional view of my coupling, showing it attached directly to the hose. Fig. 3 is a plan view, showing the openings of the female part of my coupling; and Figs. 4 and 5 are isometric views of the male and female parts, showing them in position to be coupled.

Like letters of reference represent corresponding parts in the several figures.

A represents the male part of my coupling, and is provided with lugs *a*, and also spigot *b* and shoulder *c*. As shown in Fig. 1, in some cases I provide this part with a female thread, which corresponds with the male thread of the common screw-coupling, so that it may be readily attached to hose having said male screw part.

B represents the female part of my coupling, which is provided with openings *d* and inclines *e*. The male part A of my coupling is attached to one end of a length of hose, either directly, as shown in Fig. 2, or by means of the male part of the common screw-coupling, as the case may be. The female part B is attached to one end of the length to be coupled with the first length, either directly, as shown in Fig. 2, or by means of the female part of the common screw-coupling, as shown in Fig. 1. Now, to couple the parts the lugs *a* are brought opposite the openings *d*, which are large enough to admit them. After being entered the parts A and B are turned in opposite directions, and the lugs *a* coming in contact with the inclines *e*, said inclines bring the shoulder *c* against the packing *f*, which, being pressed tightly between shoulder *c* and its seat on the female part of the coupling, forces it against the outer circumference of spigot *b*, and also the inner circumference of the female part of the coupling, thus forming a perfectly tight joint.

It will be seen that I have provided the inclines *e* with roughened faces. My reason for this is to keep the lugs *a* from slipping back after being once turned in place upon said inclines, the rubber packing serving to force the sharp side of the lugs *a* tightly against the said roughened face of the incline and hold it there.

It will also be seen that my coupling can be manufactured much cheaper than many now in use, as the only work on them after they are cast is to clean them, the annular rubber packing, when compressed between the shoulder *c* and its seat in the female part of the coupling, filling every irregularity of the surfaces with which it comes in contact, and hence forming a perfectly tight joint.

What I claim is—

1. A hose-coupling, the same being provided on its male portion with lugs *a* and on its female part with inclines *e*, said inclines

HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 242,564, dated June 7, 1881.

Application filed February 9, 1881. (Model.)

To all whom it may concern:

Be it known that I, LOUIS H. SHOLDER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Hose-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to hose-couplings; and it consists in so constructing a hose-coupling that it can be manufactured much cheaper and at the same time be just as serviceable in every respect as any of the more expensive ones now in use. It is also much more easily manipulated, and can be coupled in an instant without the use of a wrench or any like tool.

In the drawings, Figure 1 is a longitudinal sectional view of my coupling, having screw-threads formed on the male and female parts to adapt them to be attached to the common screw-coupling now in use. Fig. 2 is a longitudinal sectional view of my coupling, showing it attached directly to the hose. Fig. 3 is a plan view, showing the openings of the female part of my coupling; and Figs. 4 and 5 are isometric views of the male and female parts, showing them in position to be coupled.

Like letters of reference represent corresponding parts in the several figures.

A represents the male part of my coupling, and is provided with lugs *a*, and also spigot *b* and shoulder *c*. As shown in Fig. 1, in some cases I provide this part with a female thread, which corresponds with the male thread of the common screw-coupling, so that it may be readily attached to hose having said male screw part.

B represents the female part of my coupling, which is provided with openings *d* and inclines *e*, said inclines being roughened. *f* is an annular rubber packing. It will be seen by reference to Fig. 1 of the drawings that I also provide this part with a screw-thread adapted to correspond with the female thread of the common screw-coupling, so that it also may be readily attached to hose having said female screw part.

The operation of my device is as follows: The male part A of my coupling is attached to one end of a length of hose, either directly, as shown in Fig. 2, or by means of the male part of the common screw-coupling, as the case may be. The female part B is attached to one end of the length to be coupled with the first length, either directly, as shown in Fig. 2, or by means of the female part of the common screw-coupling, as shown in Fig. 1. Now, to couple the parts the lugs *a* are brought opposite the openings *d*, which are large enough to admit them. After being entered the parts A and B are turned in opposite directions, and the lugs *a* coming in contact with the inclines *e*, said inclines bring the shoulder *c* against the packing *f*, which, being pressed tightly between shoulder *c* and its seat on the female part of the coupling, forces it against the outer circumference of spigot *b*, and also the inner circumference of the female part of the coupling, thus forming a perfectly tight joint.

It will be seen that I have provided the inclines *e* with roughened faces. My reason for this is to keep the lugs *a* from slipping back after being once turned in place upon said inclines, the rubber packing serving to force the sharp side of the lugs *a* tightly against the said roughened face of the incline and hold it there.

It will also be seen that my coupling can be manufactured much cheaper than many now in use, as the only work on them after they are cast is to clean them, the annular rubber packing, when compressed between the shoulder *c* and its seat in the female part of the coupling, filling every irregularity of the surfaces with which it comes in contact, and hence forming a perfectly tight joint.

What I claim is—

1. A hose-coupling, the same being provided on its male portion with lugs *a* and on its female part with inclines *e*, said inclines having a roughened face, substantially as described.

2. In a hose-coupling, the combination of the male part A, with its lugs *a*, shoulder *c*, and spigot *b* of the female part, said female part being provided with inclines *e* and washer *f*, substantially as described.

3. A hose-coupling substantially as described, one part of said hose-coupling being

screw-threaded in such a manner that it may be attached to the male part of the common screw-coupling, and the other part being adapted to be attached to the female part of said common screw-coupling, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LOUIS H. SHOLDER.

Witnesses:
H. SCOTT HOWELL,
WM. F. WAPPICH.

(No Model.)

G. A. & D. R. STEDMAN.

PIPE OR HOSE COUPLING.

No. 456,295. Patented July 21, 1891.

Fig. 1.

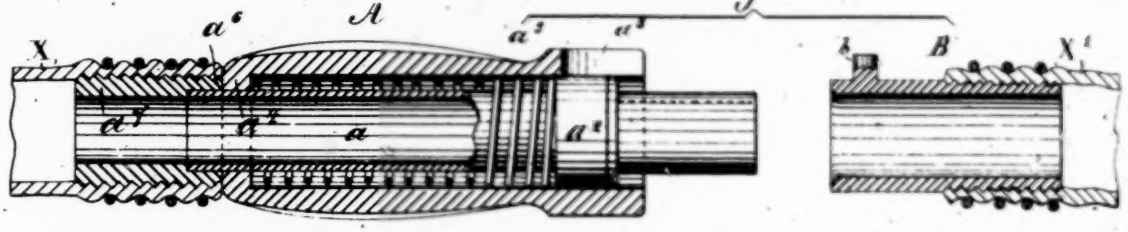


Fig. 2.

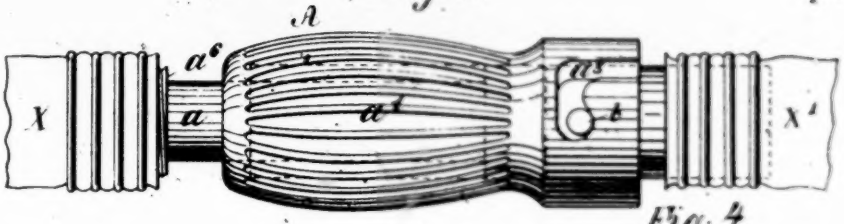


Fig. 3.

Fig. 4.

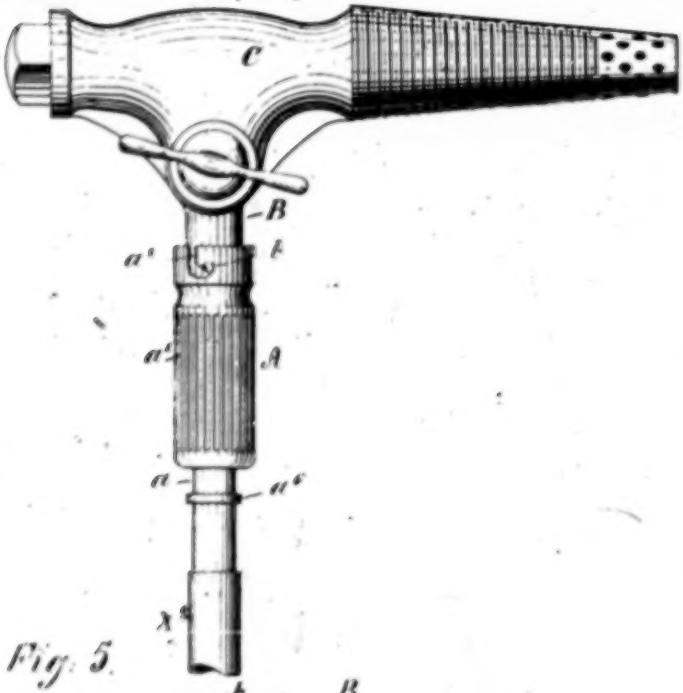


Fig. 5.

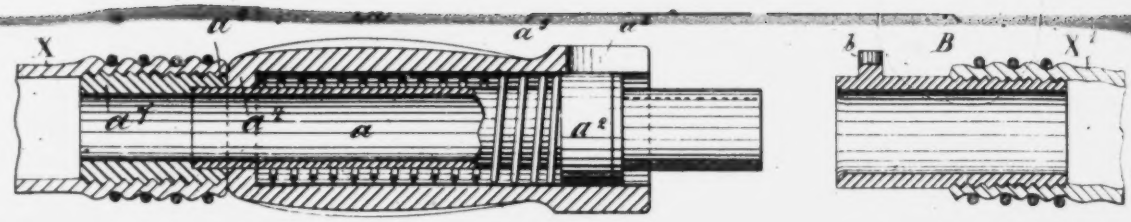
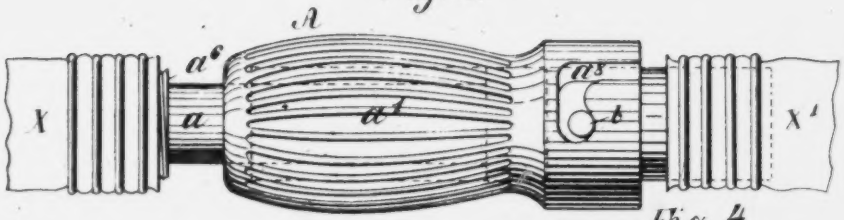


Fig. 2.

Fig. 3.



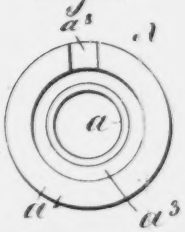


Fig. 4.

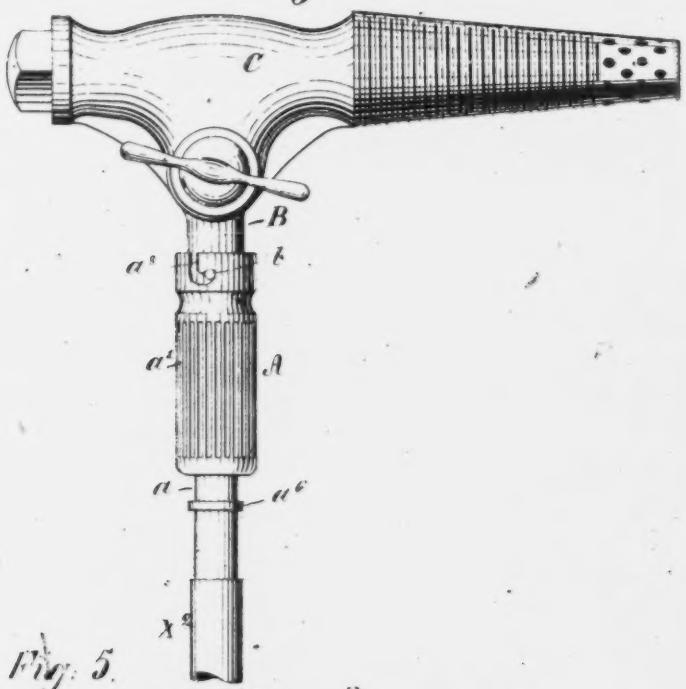
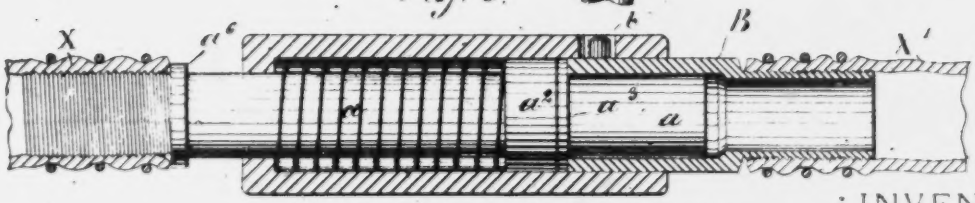


Fig. 5.



INVENTORS.

George A. Stedman,
David R. Stedman.
By Henry Connett
Attorney.

WITNESSES:
J. B. Lapenyer
Chas. A. Hall.

UNITED STATES PATENT OFFICE.

GEORGE A. STEDMAN, OF NEW YORK, N. Y., AND DAVID R. STEDMAN, OF ELIZABETH, NEW JERSEY, ASSIGNORS TO THE LEES MANUFACTURING COMPANY.

PIPE OR HOSE COUPLING.

SPECIFICATION forming part of Letters Patent No. 456,295, dated July 21, 1891.

Application filed December 18, 1890. Serial No. 375,076. (No model.)

To all whom it may concern:

Be it known that we, GEORGE A. STEDMAN, residing in the city, county, and State of New York, and DAVID R. STEDMAN, residing in Elizabeth, Union county, New Jersey, both citizens of the United States, have invented certain Improvements in Pipe or Hose Couplings, of which the following is a specification.

Our invention relates to that class of couplings wherein the sections of hose or pipes to be coupled each carries a member of the coupling and the coupling together is effected without the aid of screws; and the object of the invention is to provide a coupling which may be manipulated quickly by any one, no matter how inexperienced he may be, and one which will be perfectly tight under all ordinary conditions.

Our invention will be fully described hereinafter, and its novel features carefully defined in the claims.

In the accompanying drawings, Figure 1 is a longitudinal section of a hose-coupling embodying our improvements. This view shows the two members detached. Fig. 2 is an elevation of the coupling, showing the members locked or coupled together. Fig. 3 is an end view of the major member of the coupling. Fig. 4 is a view illustrating the application of our coupling to the coupling of an ale or beer faucet to a pipe. Fig. 5 is a sectional view of a modification.

Although we have herein shown only two applications of our coupling, it is equally well adapted for coupling pipes or hose together and for coupling pipes or hose to nipples and nozzles of all kinds.

collar a^2 forms a second bearing for the tube and keeps the latter centrally situated in the bore of the casing. Within the bore of the casing and embracing the tube a is a coiled spring a^3, which abuts at one end against the shoulder at the rear end of the casing and at the other against the inner face of the collar a^2. This spring tends to drive the tube toward the open end or mouth of the casing; but a limiting-shoulder a^6, formed on the tube, seats itself against the rear end of the casing and keeps the spring under some tension. The shoulder a^6 is formed by securing to the tube a a grooved or roughened nipple a^7, to which the hose X is secured. In the casing a', at its open end, is formed an L-shaped slot a^4, the form of which is best seen in Fig. 2.

The inferior member B is in the form of a short section of pipe, to which is secured a section of hose X'. The internal diameter of the member B is the same as the external diameter of the tube a, and the external diameter of said member is the same as the diameter of the bore in casing a', whereby said member may be slipped over the end of the tube a, which extends beyond the collar a^2 and projects from the open end of the casing, and is made to enter the latter. On the member B is a stud or projection b.

Fig. 1 shows the members separated and in their normal condition. To effect the coupling, it is only necessary to bring the two members together, pushing the inferior member over the extremity of tube a until its end bears on and against the packing-ring a^5, the stud b entering the slot a^4. The members are now pushed together as far as the slot will permit, the collar a^2 yielding and compress-

COMPANY.

PIPE OR HOSE COUPLING.

SPECIFICATION forming part of Letters Patent No. 456,295, dated July 21, 1891.

Application filed December 18, 1890. Serial No. 375,076. (No model.)

To all whom it may concern:

Be it known that we, GEORGE A. STEDMAN, residing in the city, county, and State of New York, and DAVID R. STEDMAN, residing in Elizabeth, Union county, New Jersey, both citizens of the United States, have invented certain Improvements in Pipe or Hose Couplings, of which the following is a specification.

Our invention relates to that class of couplings wherein the sections of hose or pipes to be coupled each carries a member of the coupling and the coupling together is effected without the aid of screws; and the object of the invention is to provide a coupling which may be manipulated quickly by any one, no matter how inexperienced he may be, and one which will be perfectly tight under all ordinary conditions.

Our invention will be fully described hereinafter, and its novel features carefully defined in the claims.

In the accompanying drawings, Figure 1 is a longitudinal section of a hose-coupling embodying our improvements. This view shows the two members detached. Fig. 2 is an elevation of the coupling, showing the members locked or coupled together. Fig. 3 is an end view of the major member of the coupling. Fig. 4 is a view illustrating the application of our coupling to the coupling of an ale or beer faucet to a pipe. Fig. 5 is a sectional view of a modification.

Although we have herein shown only two applications of our coupling, it is equally well adapted for coupling pipes or hose together and for coupling pipes or hose to nipples and nozzles of all kinds.

Referring primarily to the first three figures, A is the major member of the coupling as a whole, and B is the minor member. The major member comprises a tube a, to which is secured one section of hose X. This tube a extends through a tubular casing a', which is capable of rotating on the tube. On the tube a is a collar a^2, which fits the bore of the casing a' in the manner of a piston, and is provided with a packing-ring a^3 on its outer face, of rubber or similar soft packing material. The tube a has a bearing at a^4 in the rear closed end of the tubular casing, and the collar a^2 forms a second bearing for the tube and keeps the latter centrally situated in the bore of the casing. Within the bore of the casing and embracing the tube a is a coiled spring a^5, which abuts at one end against the shoulder at the rear end of the casing and at the other against the inner face of the collar a^2. This spring tends to drive the tube toward the open end or mouth of the casing; but a limiting-shoulder a^6, formed on the tube, seats itself against the rear end of the casing and keeps the spring under some tension. The shoulder a^6 is formed by securing to the tube a a grooved or roughened nipple a^7, to which the hose X is secured. In the casing a', at its open end, is formed an L-shaped slot a^8, the form of which is best seen in Fig. 2.

The inferior member B is in the form of a short section of pipe, to which is secured a section of hose X'. The internal diameter of the member B is the same as the external diameter of the tube a, and the external diameter of said member is the same as the diameter of the bore in casing a', whereby said member may be slipped over the end of the tube a, which extends beyond the collar a^2 and projects from the open end of the casing, and is made to enter the latter. On the member B is a stud or projection b.

Fig. 1 shows the members separated and in their normal condition. To effect the coupling, it is only necessary to bring the two members together, pushing the inferior member over the extremity of tube a until its end bears on and against the packing-ring a^3, the stud b entering the slot a^8. The members are now pushed together as far as the slot will permit, the collar a^2 yielding and compressing the spring a^5 behind it. The casing a' is now turned with the hand until the stud b engages the lateral branch of the slot, as seen in Fig. 2. This locks the members together. The spring keeps the packing pressed up tightly against the member B and forms a tight joint. The members may be instantly disengaged or uncoupled by reversing this operation.

To prevent dirt from getting into the interior of the casing through the slot a^8, the piston-like collar a^2 is made wide enough to cover the slot and is arranged to stand in po-

sition to cover and close the slot normally, as seen in Fig. 1.

The inferior member B may be a pipe or a nipple, as it is merely a plain tube provided with a locking-stud. In Fig. 4 we have shown the application of our coupling to the nipple of a faucet. In this figure C is a faucet of an ordinary kind, of which the outlet-nipple forms the inferior member B of the coupling. In this view a metal pipe or tube X^2 replaces the hose X of Figs. 1 and 2. In other respects the coupling is the same as that before described.

Fig. 5 is a view illustrating a slight modification. In this case the hose X is attached directly to the tube *a*, and the member B is reduced in size to receive the hose X′. By this construction hose of smaller diameter or having an internal diameter nearly the same as that of tube *a* may be coupled together. This view serves to illustrate the interior construction when the two elements are coupled or locked together. The casing *a′* may be roughened exteriorly, in order to prevent the hand from slipping. It may have any convenient form exteriorly.

Having thus described our invention, we claim—

1. In a coupling, the combination of a tube *a*, having fixed on it a collar a^2, with a packing a^3 on its face, a tubular member B, adapted to fit over the tube *a*, with its end abutting against said packing, a sliding casing on the tube *a*, a spring arranged between the collar a^2 and some part of said casing, and reciprocal fastenings on the said casing and the member B, substantially as set forth.

2. In a coupling, the combination, with a tube *a*, having fixed on it a limiting-shoulder a^6 and a collar a^2, the latter having on its outer face a packing a^3, of a tubular member B, adapted to fit over the tube *a*, with its end abutting against the packing a^3, a sliding casing on the tube *a*, having a bore in which the collar a^2 fits, a spring a^5 within said casing and embracing the tube *a*, said spring abutting at one end against the collar a^2 and at its other end against some part of said casing, and reciprocal fastenings on the said casing and the member B, the limiting-shoulder a^6 being exterior to the casing, substantially as set forth.

In witness whereof we have hereunto signed our names in the presence of two subscribing witnesses.

GEORGE A. STEDMAN.
DAVID R. STEDMAN.

Witnesses:
ARTHUR FITCH,
THEODORE F. LEES.

No. 610,359. Patented Sept. 6, 1898.

T. F. LEES.

COUPLING FOR PIPES AND HOSE.

(Application filed Oct. 6, 1897.)

(No Model.)

Fig. 1.

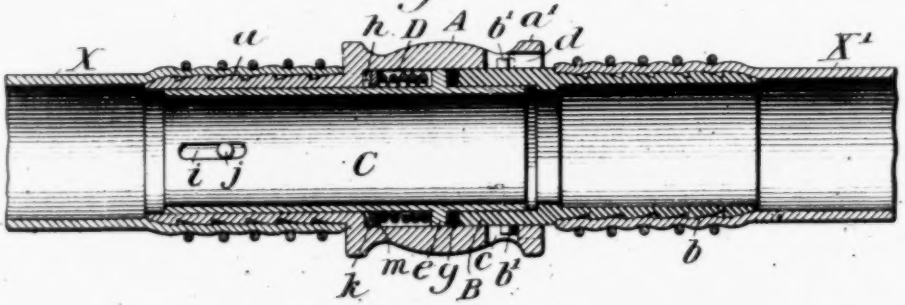


Fig. 2.

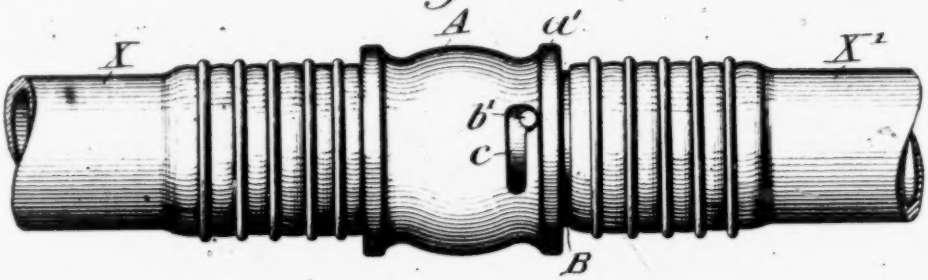


Fig. 3.

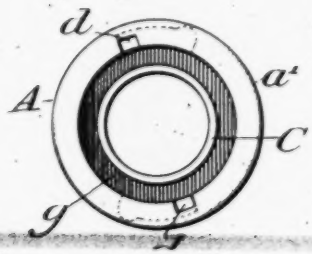


Fig. 1.

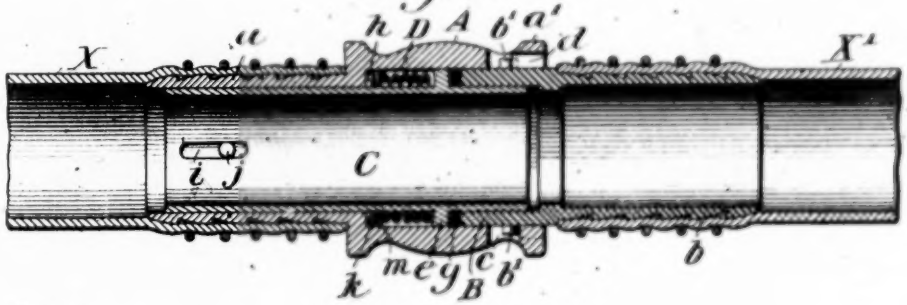


Fig. 2.

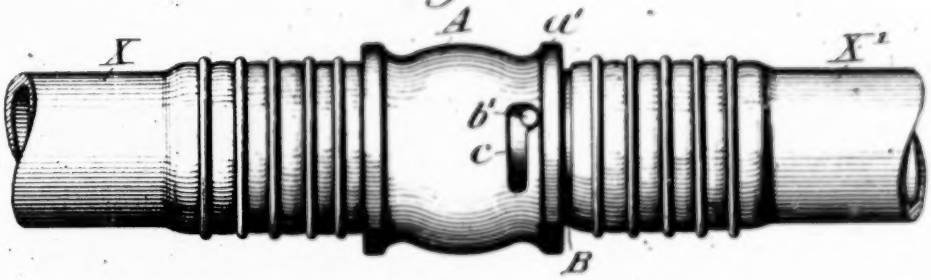
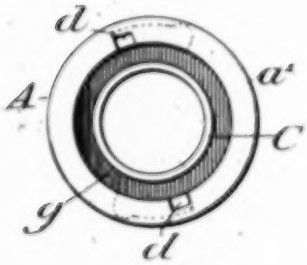


Fig. 3.



Witnesses.
J. H. Glimm
Peter A. Ross.

Inventor.
Theodore F. Lees
by Henry Connett
Atty.

UNITED STATES PATENT OFFICE.

THEODORE F. LEES, OF NEW YORK, N. Y.

COUPLING FOR PIPES AND HOSE.

SPECIFICATION forming part of Letters Patent No. 610,359, dated September 6, 1898.

Application filed October 6, 1897. Serial No. 654,278. (No model.) Patented in England February 12, 1895, No. 3,074.

To all whom it may concern:

Be it known that I, THEODORE F. LEES, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Couplings for Pipes and Hose, (which have been patented in Great Britain under No. 3,074, dated February 12, 1895,) of which the following is a specification.

This invention relates to improvements in the coupling described in Letters Patent of the United States of July 21, 1891, No. 456,295. In the present instance the coupling comprises in part a tubular major member having a flange about one or both of its ends and provided at one end with a tubular prolongation, preferably circumferentially corrugated, adapted to receive a section of hose if the coupling is to be used for flexible hose. Within this major member is mounted a sliding tube having on it a collar or flange to form one abutment for a coil-spring, which is placed between this collar and a shoulder formed on the interior of the major member of the coupling. This inner tube projects out from the mouth or receiving end of the major member and extends back into the tubular prolongation of such major member at the end opposite to its mouth, where said tube has in it a slot engaged by a pin or stud in the major member, this stud forming a limiting-stop to limit the movement of the tube longitudinally in the major member of the coupling. The minor member of the coupling is also tubular. At one end it is adapted to fit snugly over the protruding end of the sliding tube in the major member of the coupling, and to fit snugly into the mouth or receiving end of said major member. The entering end of this minor member impinges on a packing-ring on said inner sliding tube, other, the inner sliding tube being pushed back, compressing the cushion-spring, in order to effect the locking.

In the accompanying drawings an embodiment of this invention is illustrated, Figure 1 being a longitudinal axial section thereof, Fig. 2 a plan view, and Fig. 3 an end view, of the major member, showing its receiving end.

A is the major member of the coupling, provided with a prolongation *a* for the attachment of the hose X and with a flange *a'* at its mouth or receiving end.

B is the minor member, which is provided with a prolongation *b* to receive the hose X' and with locking-studs *b'* to engage locking-slots *c* in the major member, the studs *b'* passing through passages or openings *d* in the flange *a'*.

C is the sliding tube in the major member, this tube having a flange *e* and packing-ring *g*.

D is the spring between the flange *e* and a shoulder at *h* on the major member.

In the tube C is a slot *i*, which is engaged by a stud *j* on the major member A. This slot limits the movement of the tube C, under the influence of the spring D, when the members of the coupling are disengaged.

It will be noted that in the construction of the Patent No. 456,295 the hose X is secured to the tube C or what corresponds thereto, while in the present case it is secured to the major member and not to the tube C. Moreover, in the present case the entering end of the minor member B, where it bears on the packing-ring *g*, is slightly beveled, so that it tends to press the latter outward against the inner wall of the major member and produce a very tight joint. This construction obviously prevents the separation of the parts at the packed joint when there is a tensile strain

COUPLING FOR PIPES AND HOSE.

SPECIFICATION forming part of Letters Patent No. 610,359, dated September 6, 1898.

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In the accompanying drawings an embodiment of this invention is illustrated, Figure 1 being a longitudinal axial section thereof, Fig. 2 a plan view, and Fig. 3 an end view, of the major member, showing its receiving end.

A is the major member of the coupling, provided with a prolongation *a* for the attachment of the hose X and with a flange *a'* at its mouth or receiving end.

B is the minor member, which is provided with a prolongation *b* to receive the hose X' and with locking-studs *b'* to engage locking-slots *c* in the major member, the studs *b'* passing through passages or openings *d* in the flange *a'*.

C is the sliding tube in the major member, this tube having a flange *e* and packing-ring *g*.

D is the spring between the flange *e* and a shoulder at *h* on the major member.

In the tube C is a slot *i*, which is engaged by a stud *j* on the major member A. This slot limits the movement of the tube C, under the influence of the spring D, when the members of the coupling are disengaged.

It will be noted that in the construction of the Patent No. 456,295 the hose X is secured to the tube C or what corresponds thereto, while in the present case it is secured to the major member and not to the tube C. Moreover, in the present case the entering end of the minor member B, where it bears on the packing-ring *g*, is slightly beveled, so that it tends to press the latter outward against the inner wall of the major member and produce a very tight joint. This construction obviously prevents the separation of the parts at the packed joint when there is a tensile strain on the hose—as, for example, when the pull on the hose X is resisted by a pull on the hose X'.

Preferably there will be interposed between the end of the spring D and the shoulder *h* a packing-ring *k*, resting against said shoulder, and a washer *m*, resting on the packing, to protect the latter from abrasion by the spring. The packing *k* is a safeguard against leakage

about the tubular member C where it plays in the part *a* of the major member A of the coupling.

Having thus described my invention, I claim—

1. In a coupling, the combination with the major, female member A, having formed in one with it the prolongation *a* for the hose, of the flanged sliding tube C, mounted in the major member, the spring D, arranged between shoulders on the major member and said tube C, the minor member B, adapted to fit over the said tube C and into the major member, a packing-ring at the joint and a locking device to secure the major and minor members together, substantially as set forth.

2. In a coupling, the combination, with the major member A, having formed in one with it the prolongation *a* for the hose, and having a locking-slot, *c*, of the flanged sliding tube C, mounted in the major member and furnished with a limiting-slot *i*, engaging a stud on the major member, the spring D, and the minor member B, provided with locking-studs, as set forth.

3. In a coupling, the combination with the member A, provided with a prolongation *a* and an internal shoulder *h*, the member B, and means substantially as described for locking the members together, of the flanged tube C in the said members, said tube having a flange *e*, the packing-ring *g*, between the flange *e* and the end of the member B, the packing-ring *k* and washer *m*, adjacent to the shoulder *h*, and the spring C, between the shoulder *e* and washer *m*, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

THEODORE F. LEES.

Witnesses:
PETER A. ROSS,
HENRY CONNETT.

A. M. BARCUS.

COUPLING FOR HOSE AND THE LIKE.

APPLICATION FILED FEB. 25, 1913.

1,117,762.

Patented Nov. 17, 1914.

Fig. 1

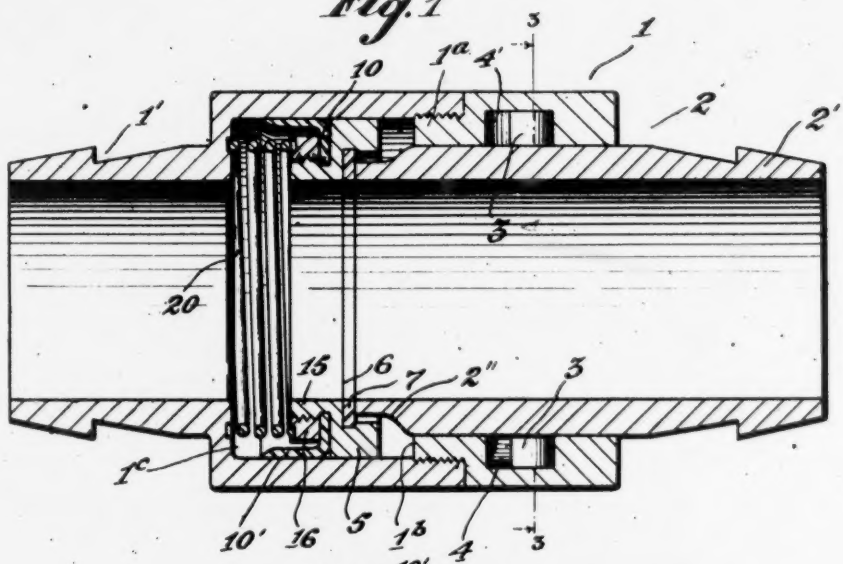


Fig. 2

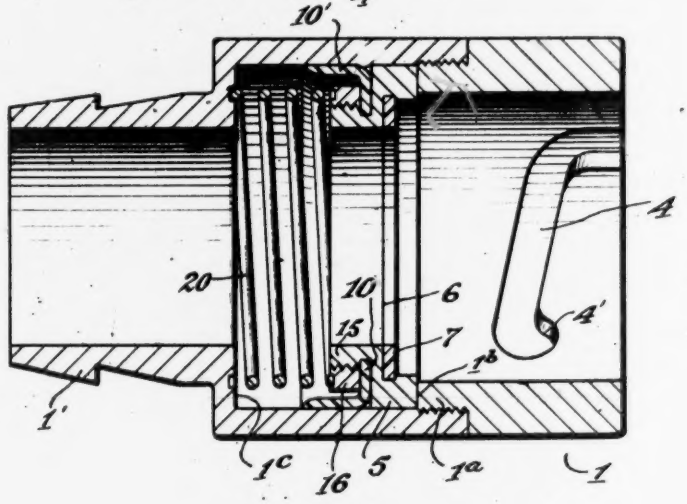
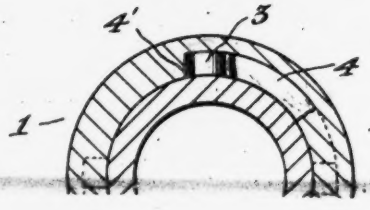


Fig. 3



APPLICATION FILED FEB. 26, 1913.

1,117,762. Patented Nov. 17, 1914.

Fig. 1

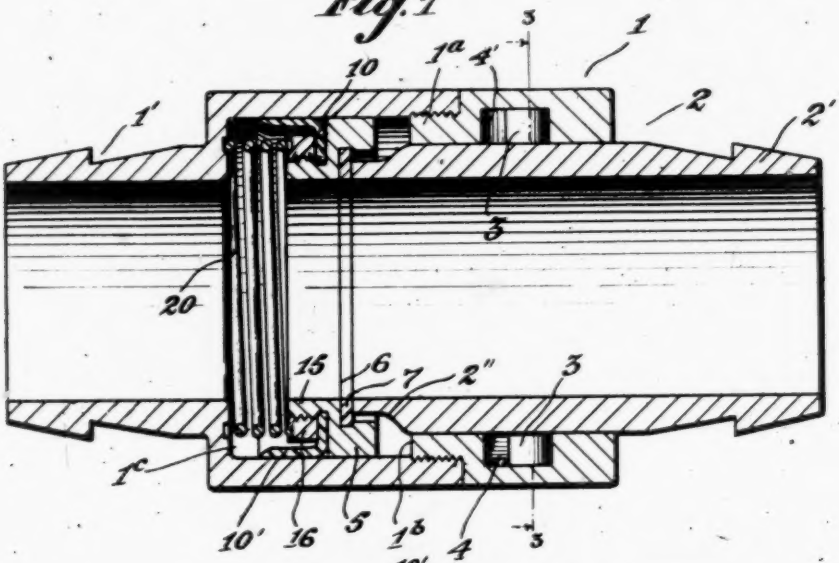


Fig. 2

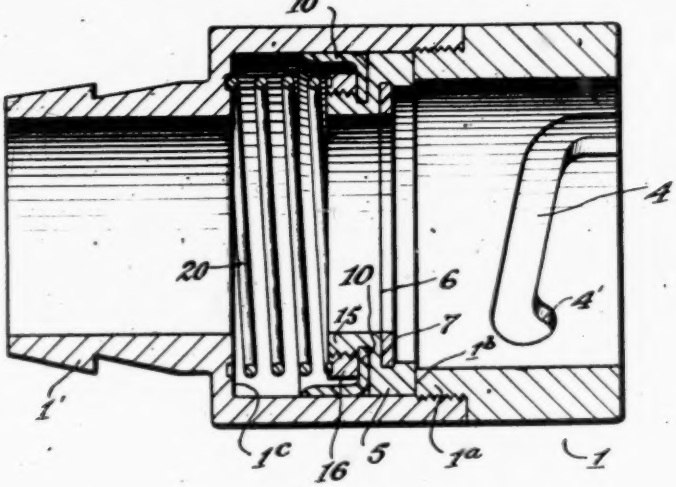
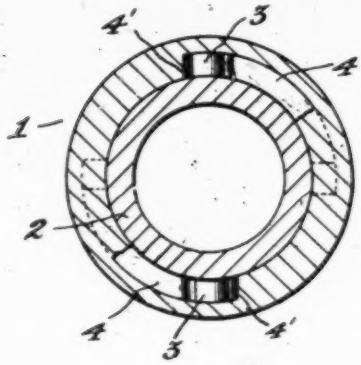


Fig. 3



Witnesses

James E. Spiell.

Clara A. Harne

Inventor

Albert M. Barcus.

By Adams & Brooks

Attorneys

UNITED STATES PATENT OFFICE.

ALBERT M. BARCUS, OF RAYMOND, WASHINGTON.

COUPLING FOR HOSE AND THE LIKE.

1,117,762. Specification of Letters Patent. Patented Nov. 17, 1914.

Application filed February 25, 1913. Serial No. 750,582.

To all whom it may concern:

Be it known that I, ALBERT M. BARCUS, a citizen of the United States of America, and a resident of the city of Raymond, in the county of Pacific and State of Washington, have invented certain new and useful Improvements in Couplings for Hose and the like, of which the following is a specification.

My invention relates to couplings of the above type, and has for one of its objects to provide a structure wherein the parts can be readily connected and disconnected.

Another object resides in the provision of means for utilizing the pressure of the fluid in obtaining a water tight joint between the coupling parts.

My invention is adapted for connecting one section of hose or other conduit to another section or to a hydrant.

Other objects will be set forth as my description progresses, and those features of construction, arrangements and combinations of parts on which I desire protection, succinctly defined in my annexed claim.

In the accompanying drawing I have illustrated my invention as adapted for connecting two sections of hose.

In the said drawing: Figure 1 is a longitudinal section of the coupling with the parts thereof interlocked. Fig. 2 is a longitudinal section of the outer coupling part, and Fig. 3 is a transverse section on line 3—3 of Fig. 1.

Referring to the drawing by numerals of reference, 1 and 2 indicate outer and inner coupling parts respectively, these being substantially cylindrical and having suitable roughened shanks or extensions 1′, 2′ for reception of the hose sections, not shown. The inner end portion of part 2 is preferably reduced or tapered, as at 2″, to facilitate its insertion into part 1. Said part 2 is and the opposite end wall 1ᵉ of coupling part 1, I arrange a slide member 5 of open formation, this being provided on one side with a seat 6 for engagement with the adjacent end of coupling part 2. This seat is preferably faced with a packing ring 7, as shown. The opposite side face of slide member 5 is provided with an annular externally threaded boss 15 which like the body proper of member 5 is bored or open for free passage of the water from one coupling part to the other.

Reference numeral 10 indicates a cupped washer seated on slide member 5 about the annular boss 15 thereof, and held thereon by a nut 16. In thus mounting washer 10, the flexible outer edge portion 10′ extends lengthwise of coupling part 1 and will be pressed firmly outwardly against the inner face thereof by the water or other fluid.

Reference numeral 20 indicates a spiral spring interposed between wall 1ᵉ and nut 16, the same tending to press slide member 5 toward shoulder 1ᵇ, against which latter the member will rest when the coupling parts are disengaged. This spring serves to hold slide member 5 against the end of coupling part 2 when the fluid pressure is cut off, as when the parts are first coupled, thereby overcoming leakage between the parts during the initial portion of the flow incident to the opening of the cut off valve. Pressure applied to member 5 holds coupling part 2 with its lugs 3 in the depressions 4′ of its grooves 4.

Various changes can be made in the minor details of construction, as fall within the scope of my annexed claim.

Having thus described my invention what I claim as new, and desire to secure by Letters Patent of the United States of America, is:—

In a coupling, outer and inner coupling

To all whom it may concern:

Be it known that I, ALBERT M. BARCUS, a citizen of the United States of America, and a resident of the city of Raymond, in the county of Pacific and State of Washington, have invented certain new and useful Improvements in Couplings for Hose and the like, of which the following is a specification.

My invention relates to couplings of the above type, and has for one of its objects to provide a structure wherein the parts can be readily connected and disconnected.

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My invention is adapted for connecting one section of hose or other conduit to another section or to a hydrant.

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Referring to the drawing by numerals of reference, 1 and 2 indicate outer and inner coupling parts respectively, these being substantially cylindrical and having suitable roughened shanks or extensions 1′, 2′ for reception of the hose sections, not shown. The inner end portion of part 2 is preferably reduced or tapered, as at 2″, to facilitate its insertion into part 1. Said part 2 is also provided with lugs 3 adapted for riding in cam grooves 4 of part 1, whereby upon partial rotation of one part on the other, the coupling part 2 will be drawn inwardly until said lugs 3 reach depressions 4′, occurring at the inner end portions of the grooves. As now considered, coupling part 1 is formed of two sections arranged end to end and one thereof having a threaded annular extension 1^a in threaded engagement with the other section and projecting inwardly from the inner face thereof to provide a shoulder 1^b. Between shoulder 1^b and the opposite end wall 1^c of coupling part 1, I arrange a slide member 5 of open formation, this being provided on one side with a seat 6 for engagement with the adjacent end of coupling part 2. This seat is preferably faced with a packing ring 7, as shown. The opposite side face of slide member 5 is provided with an annular externally threaded boss 15 which like the body proper of member 5 is bored or open for free passage of the water from one coupling part to the other.

Reference numeral 10 indicates a cupped washer seated on slide member 5 about the annular boss 15 thereof, and held thereon by a nut 16. In thus mounting washer 10, the flexible outer edge portion 10′ extends lengthwise of coupling part 1 and will be pressed firmly outwardly against the inner face thereof by the water or other fluid.

Reference numeral 20 indicates a spiral spring interposed between wall 1^c and nut 16, the same tending to press slide member 5 toward shoulder 1^b, against which latter the member will rest when the coupling parts are disengaged. This spring serves to hold slide member 5 against the end of coupling part 2 when the fluid pressure is cut off, as when the parts are first coupled, thereby overcoming leakage between the parts during the initial portion of the flow incident to the opening of the cut off valve. Pressure applied to member 5 holds coupling part 2 with its lugs 3 in the depressions 4′ of its grooves 4.

Various changes can be made in the minor details of construction, as fall within the scope of my annexed claim.

Having thus described my invention what I claim as new, and desire to secure by Letters Patent of the United States of America, is:—

In a coupling, outer and inner coupling parts the former of which comprises two sections arranged end to end and one having its outer end portion formed with cam grooves and its inner end portion provided with a threaded annular extension threaded in the other section and projecting inwardly from the inner face thereof to provide an internal shoulder, the other section of said outer coupling part being formed in its opposite end portion with a second shoulder opposing the shoulder provided by the annular extension of said first named coupling section, a hollow slide member ar-

ranged in said outer coupling part and provided with a packing ring bearing against the inner face thereof, spring means interposed between the second shoulder of said outer coupling part and said slide member, said slide member being arranged between the shoulders of said outer coupling part whereby the first named shoulder thereof will limit movement of the slide member by said spring means, said inner coupling part being insertible in said outer coupling part, and normally engaging said slide member and holding the same spaced inwardly from the said first named shoulder of said first named coupling part, and lugs on said inner coupling part adapted for riding in the cam-grooves of said outer coupling part, for the purpose specified.

Signed at Raymond, Washington, this 11th day of February, 1913.

ALBERT M. BARCUS.

Witnesses:

E. S. ROBINSON,

G. E. FOIDELL.

F. D. WINKLEY.

LUBRICATING SYSTEM.

APPLICATION FILED MAY 1, 1916.

1,201,414.

Patented Oct. 17, 1916.

2 SHEETS—SHEET 1.

Fig. 1

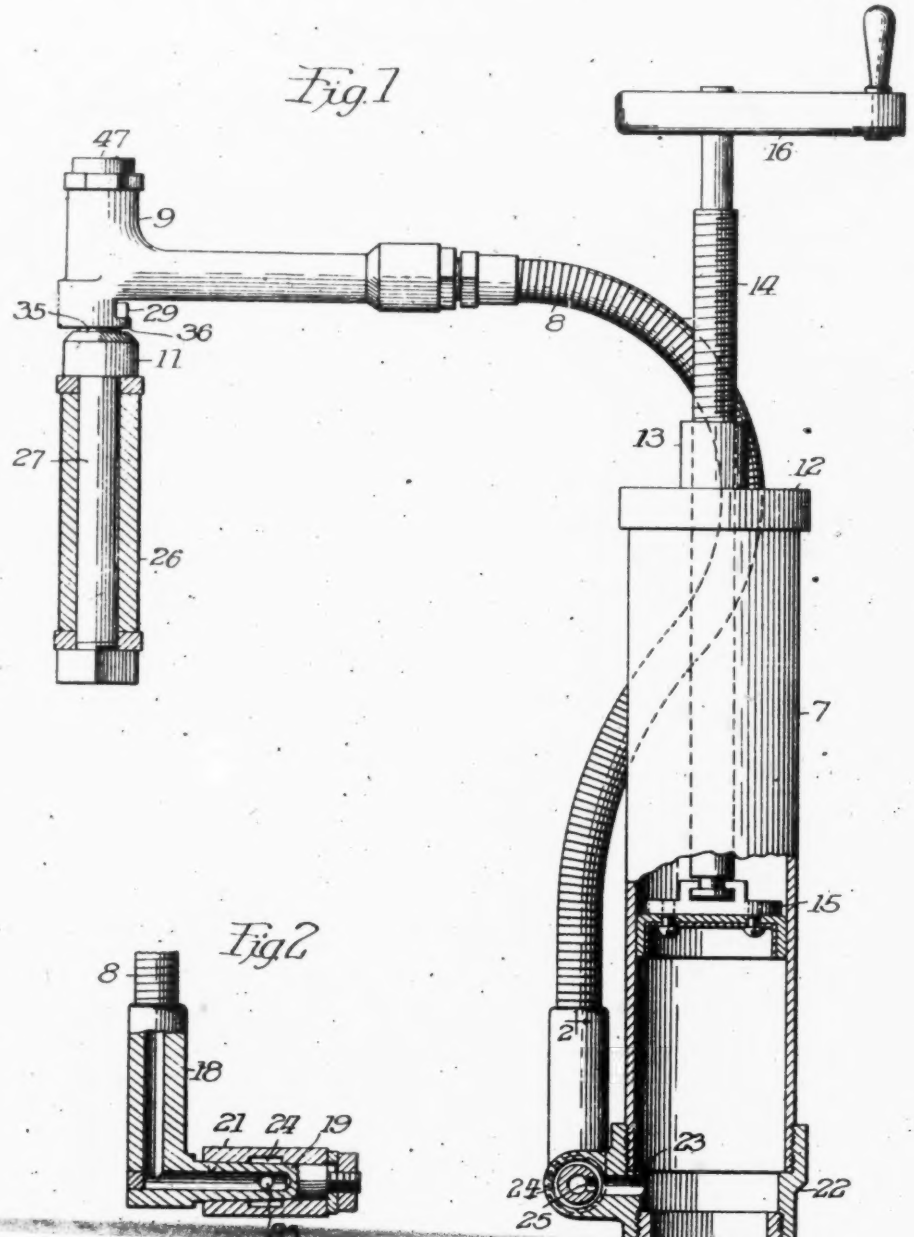

Fig. 2

1,201,414.

Patented Oct. 17, 1916.

2 SHEETS—SHEET 1.

Fig. 1.

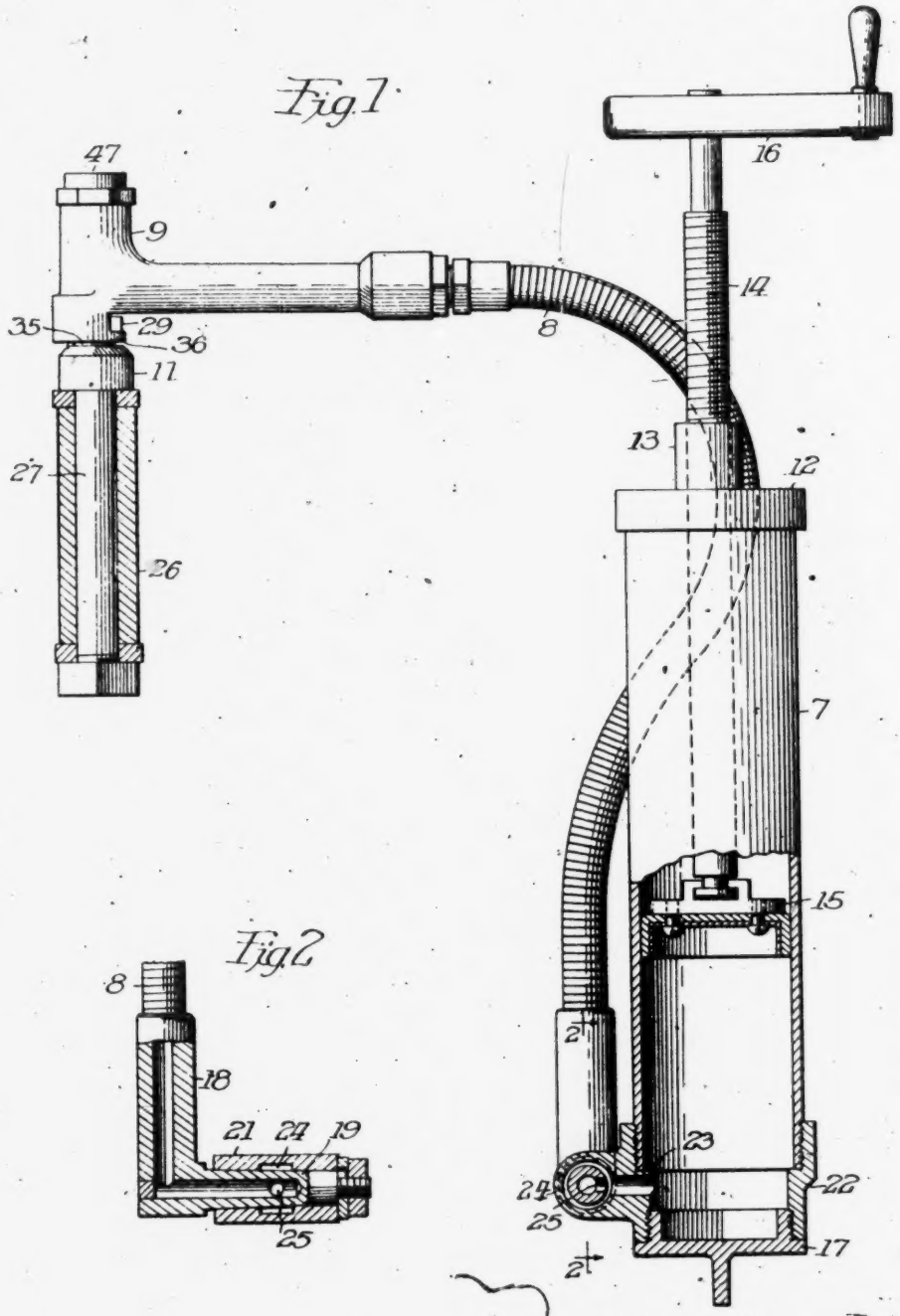

Fig. 2.

Inventor

Frank D. Winkley

By Pond & Wilson

Attys

443.

F. D. WINKLEY.

LUBRICATING SYSTEM.

APPLICATION FILED MAY 1, 1916.

1,201,414.

Patented Oct. 17, 1916.

2 SHEETS—SHEET 2.

Fig. 3

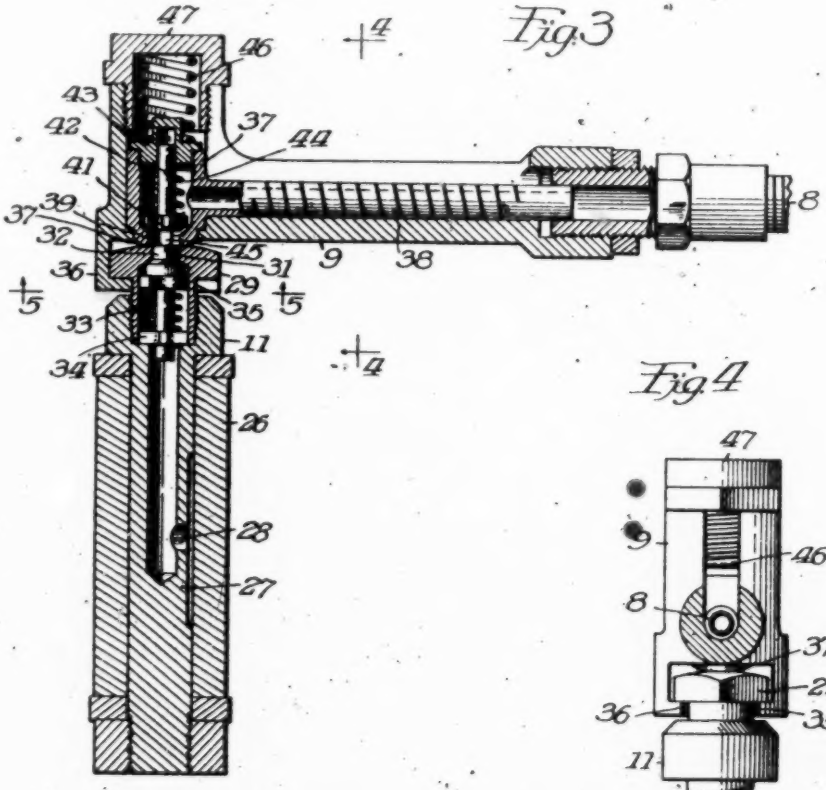

Fig. 4

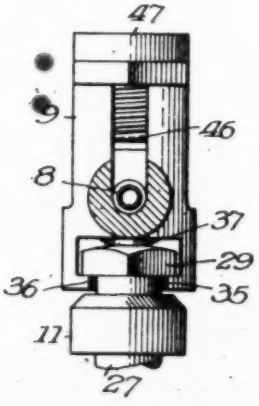

Fig. 5

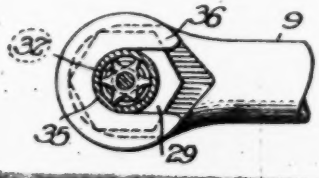

Fig. 6

F. D. WINKLEY.

LUBRICATING SYSTEM.

APPLICATION FILED MAY 1, 1916.

1,201,414.

Patented Oct. 17, 1916.

2 SHEETS—SHEET 2.

Fig. 3

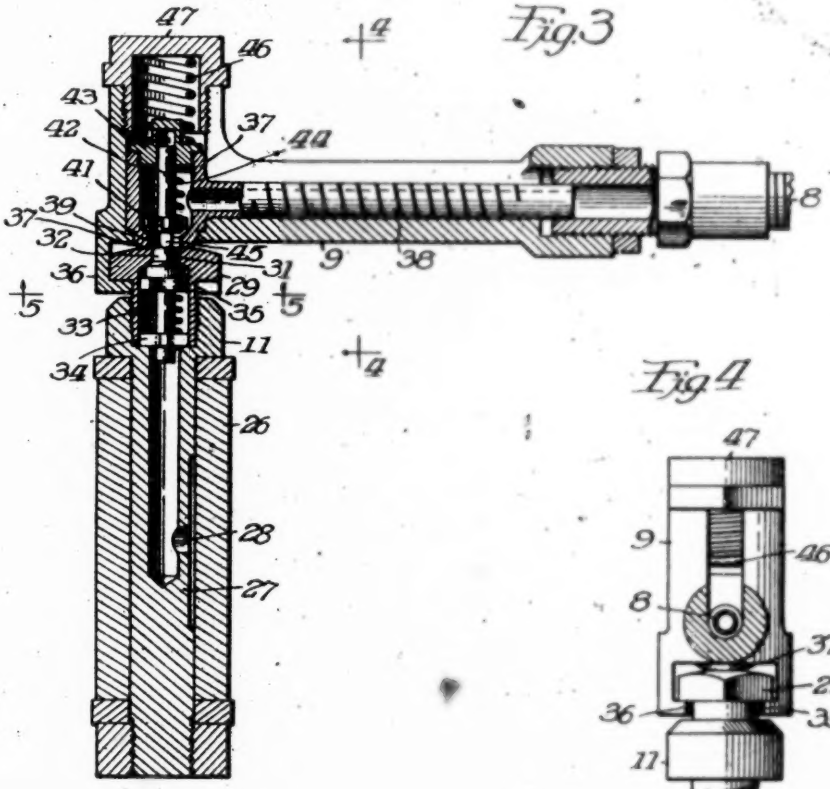

Fig. 4

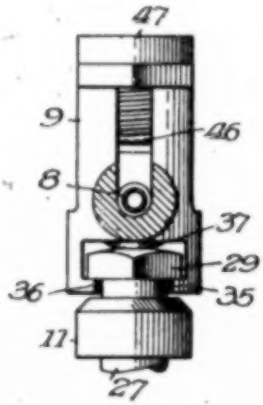

Fig. 5

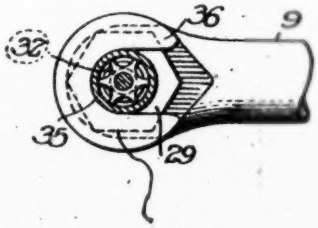

Fig. 6

Inventor

Frank D. Winkley

By Pond & Wilson

Attys

UNITED STATES PATENT OFFICE.

FRANK DREW WINKLEY, OF MADISON, WISCONSIN, ASSIGNOR TO WINKLEY & PUTNAM COMPANY, OF MADISON, WISCONSIN, A CORPORATION OF WISCONSIN.

LUBRICATING SYSTEM.

1,201,414. Specification of Letters Patent. Patented Oct. 17, 1916.

Application filed May 1, 1916. Serial No. 94,616. REISSUED

To all whom it may concern:

Be it known that I, FRANK D. WINKLEY, a citizen of the United States, residing at Madison, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Lubricating Systems, of which the following is a specification.

This invention relates in general to lubricating systems and has more particular reference to a system for lubricating the various minor bearings, such as the spring-bolts, brake-operating mechanism, steering mechanism, etc., of a motor car.

Prior to my invention it has been customary to equip the various bearings of this character with grease cups from which grease was delivered to the bearings by screwing down the cups. It has been found, however, that grease is not entirely suitable as a lubricant for bearings of this character for the reason that it soon becomes mixed with abrasions from the working surfaces and other foreign matter, and hardens so that it fills up the oil passages and prevents adequate lubrication of the parts.

My present invention is designed to provide a lubricating system in which a fluid lubricant may be employed and by which it may be readily forced into the bearings under pressure so as to insure an adequate lubrication of the working parts.

Another object of my invention is to provide an improved oil receptacle as a part of the bearing to be lubricated, and to provide an oil supply nozzle which can be readily attached to and detached from the oil receptacle, and which, when attached, will form an oil-tight joint through which oil may be forced into the receptacle and to the bearings.

Another object of my invention is to provide a lubricating system embodying a few

Various other objects and advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following description when considered in connection with the accompanying drawings.

Referring to the drawings—Figure 1 is a side elevation, partially in section, of a lubricating system embodying my invention; Fig. 2 is a fragmentary sectional view on the line 2—2 of Fig. 1; Fig. 3 is an enlarged sectional view through the nozzle and the oil receptacle; Figs. 4 and 5 are sectional views on the lines 4—4 and 5—5 of Fig. 3; and Fig. 6 is an end view of the nozzle valve.

From the drawings it will be observed that my novel system comprises primarily an oil container 7, a flexible conduit 8 equipped with a nozzle 9, and an oil receptacle 11 which forms a part of each bearing to be oiled.

More specifically the container 7 comprises a cylinder, as shown in Fig. 1, equipped at its upper end with a cap 12 having a tapped boss 13 through which the piston rod or spindle 14 is threaded. The lower end of this rod is rotatably connected to a piston or plunger 15 and the upper end is equipped with a handle 16 by means of which the rod may be turned to move the piston longitudinally in the cylinder. The lower end of the cylinder is closed by a large removable cap 17, which may be unscrewed so that the cylinder can be filled with oil by holding it in inverted position beneath a faucet or other source of oil supply.

The flexible conduit 8 is connected with the container through a swivel joint which together with the flexibility of the conduit enables the nozzle 9 to be moved about to any desired position with respect to the container for attachment to the various oil receptacles

Application filed May 1, 1916. Serial No. 94,618.

REISSUED

To all whom it may concern:

Be it known that I, FRANK D. WINKLEY, a citizen of the United States, residing at Madison, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Lubricating Systems, of which the following is a specification.

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Prior to my invention it has been customary to equip the various bearings of this character with grease cups from which grease was delivered to the bearings by screwing down the cups. It has been found, however, that grease is not entirely suitable as a lubricant for bearings of this character for the reason that it soon becomes mixed with abrasions from the working surfaces and other foreign matter, and hardens so that it fills up the oil passages and prevents adequate lubrication of the parts.

My present invention is designed to provide a lubricating system in which a fluid lubricant may be employed and by which it may be readily forced into the bearings under pressure so as to insure an adequate lubrication of the working parts.

Another object of my invention is to provide an improved oil receptacle as a part of the bearing to be lubricated, and to provide an oil supply nozzle which can be readily attached to and detached from the oil receptacle, and which, when attached, will form an oil-tight joint through which oil may be forced into the receptacle and to the bearings.

Another object of my invention is to provide a lubricating system embodying a flexible conduit and a swivel connection between the conduit and container or pressure cylinder, so that the nozzle carried by the conduit can be placed in any desired position so as to be readily attached to the oil receptacles of the various bearings on the car.

Still another object is to provide a system of this character which will be simple in construction, cheap to manufacture and easy to manipulate, and which will positively force the oil under any required pressure to the interior of the bearing to be oiled.

Various other objects and advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following description when considered in connection with the accompanying drawings.

Referring to the drawings—Figure 1 is a side elevation, partially in section, of a lubricating system embodying my invention; Fig. 2 is a fragmentary sectional view on the line 2—2 of Fig. 1; Fig. 3 is an enlarged sectional view through the nozzle and the oil receptacle; Figs. 4 and 5 are sectional views on the lines 4—4 and 5—5 of Fig. 3; and Fig. 6 is an end view of the nozzle valve.

From the drawings it will be observed that my novel system comprises primarily an oil container 7, a flexible conduit 8 equipped with a nozzle 9, and an oil receptacle 11 which forms a part of each bearing to be oiled.

More specifically the container 7 comprises a cylinder, as shown in Fig. 1, equipped at its upper end with a cap 12 having a tapped boss 13 through which the piston rod or spindle 14 is threaded. The lower end of this rod is rotatably connected to a piston or plunger 15 and the upper end is equipped with a handle 16 by means of which the rod may be turned to move the piston longitudinally in the cylinder. The lower end of the cylinder is closed by a large removable cap 17, which may be unscrewed so that the cylinder can be filled with oil by holding it in inverted position beneath a faucet or other source of oil supply.

The flexible conduit 8 is connected with the container through a swivel joint which together with the flexibility of the conduit enables the nozzle 9 to be moved about to any desired position with respect to the container for attachment to the various oil receptacles on a car. By referring to Figs. 1 and 2 it will be observed that the conduit 8 emanates from a shank 18 having a laterally extending hollow trunnion 19 which is journaled in a hollow boss 21 formed integral with the bottom member 22 of the container. A passageway 23 leading from the container into the hollow boss terminates in an annular groove 24 which communicates with the interior of the trunnion 19 through a port 25.

The bearing, designated generally by reference character 26, in which my improved oil receptacle is embodied, comprises a hol-

low spindle 27 having an outlet port 28 through which oil is supplied to the surfaces to be lubricated. The upper end of the spindle, instead of being equipped with a grease cup, as has been customary prior to my invention, is provided with a head 29 which is threaded into the enlarged upper end of the spindle 27. This head has an oil receiving opening 31 in its top which is normally closed so as to exclude dust and dirt by a valve 32 which is machined to snugly fit the aperture. A coiled expansion spring 33 interposed between the lower face of the valve disk and a spider 34 disposed in the lower end of the shank 35 of the head normally retains this valve in closed position. It will be observed from Fig. 3 that the upper end of the valve lies flush with the upper face of the head so that the end of a bearing equipped with my oil receptacle presents a smooth and attractive appearance which is not complicated or disfigured by any permanent grease cup.

The free end of the flexible conduit 8 is threaded into the nozzle 9 which is shaped to provide on the bottom of its outer end a bifurcated portion 36 adapted to straddle the shank 35 of the oil receptacle head and to be engaged beneath this head, as shown in Fig. 3. Within the nozzle proper there is mounted what I term an oil cup 37 which communicates with the conduit 8 through a branch conduit 38. This cup has its lower end shaped to project outwardly beyond the plane of the nozzle proper toward the bifurcated portion 36, and this lower wall of the cup is equipped with a discharge aperture 39 which is normally closed by a valve 41 carried on a stem 42 which extends upwardly into a cap 43 threaded into the upper end of the cup. An expansion spring 44 surrounding the stem normally holds the valve in closed position, and when closed an extension 45 beneath the valve disk projects downwardly beyond the bottom of the cup. It will be observed from Fig. 6 that this extension 45 extends diametrically entirely across the discharge aperture 39 and is wider than the oil-receiving aperture 31 in the head 29 so that it will engage the head on both sides of the aperture when the nozzle the oil receptacle to which it is desired to deliver lubricant by engaging the bifurcated portion 36 of the nozzle beneath the head and sliding the nozzle transversely of the head or toward the right, viewing Fig. 3, into the position shown in this figure. The engagement of the extension 45 with the top of the head will open the valve 41 and the cup will yield upwardly against the spring 46 sufficiently to accommodate the device to heads of various thicknesses, but this spring will hold the bottom of the cup snugly against the head of the oil receptacle so as to provide an oil-tight joint at this point. After the nozzle has been attached the handle 16 is turned to force the plunger 15 downwardly in the container, thereby forcing oil under pressure through the conduit into the oil cup 37 and downwardly into the oil receptacle, the valve 32 in the receptacle being opened against the force of the spring 33 by the pressure of the inflowing oil. When sufficient lubricant has been delivered to the bearing a partial reverse rotation of the handle 16 will relieve the pressure in the cup and permit the valve 32 to close. The nozzle may then be detached from the head by slipping it off laterally, and as soon as the pressure against the extension 45 is released the valve 41 will be closed by its spring 44.

It will be obvious from the foregoing that I have provided a lubricating system in which the discharge nozzle can be very quickly attached to and detached from an oil-receiving receptacle of simple and economical construction, that the oil can be forced by my system positively into the receptacle and bearing in any desired quantities, and that when the system is not in use all leakage is precluded since the valve 41 is maintained at all times against its seat except when positively unseated by the act of attaching the nozzle to a properly constructed head.

While I prefer to equip the bearings to be lubricated with oil receptacles of the character described, to which my improved nozzle may be detachably connected, it should be obvious that the oil receptacles could be structurally independent of the

on receiving opening 31 in its top which is normally closed so as to exclude dust and dirt by a valve 32 which is machined to snugly fit the aperture. A coiled expansion spring 33 interposed between the lower face of the valve disk and a spider 34 disposed in the lower end of the shank 35 of the head normally retains this valve in closed position. It will be observed from Fig. 3 that the upper end of the valve lies flush with the upper face of the head so that the end of a bearing equipped with my oil receptacle presents a smooth and attractive appearance which is not complicated or disfigured by any permanent grease cup.

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The oil cup 37 is yieldingly mounted in the nozzle proper and is held downwardly therein with its bottom projecting beyond the plane of the nozzle proper by a relatively stiff expansion spring 46 interposed between the cap 43 of the cup and a cap 47 threaded into the top of the nozzle body. The lower end of the cup is therefore held in its lowermost position and the valve is normally maintained in closed position by the spring 44.

When it is desired to use my improved system the nozzle is attached to the head of cup will yield upwardly against the spring 46 sufficiently to accommodate the device to heads of various thicknesses, but this spring will hold the bottom of the cup snugly against the head of the oil receptacle so as to provide an oil-tight joint at this point. After the nozzle has been attached the handle 16 is turned to force the plunger 15 downwardly in the container, thereby forcing oil under pressure through the conduit into the oil cup 37 and downwardly into the oil receptacle, the valve 32 in the receptacle being opened against the force of the spring 33 by the pressure of the inflowing oil. When sufficient lubricant has been delivered to the bearing a partial reverse rotation of the handle 16 will relieve the pressure in the cup and permit the valve 32 to close. The nozzle may then be detached from the head by slipping it off laterally, and as soon as the pressure against the extension 45 is released the valve 41 will be closed by its spring 44.

It will be obvious from the foregoing that I have provided a lubricating system in which the discharge nozzle can be very quickly attached to and detached from an oil-receiving receptacle of simple and economical construction, that the oil can be forced by my system positively into the receptacle and bearing in any desired quantities, and that when the system is not in use all leakage is precluded since the valve 41 is maintained at all times against its seat except when positively unseated by the act of attaching the nozzle to a properly constructed head.

While I prefer to equip the bearings to be lubricated with oil receptacles of the character described, to which my improved nozzle may be detachably connected, it should be obvious that the oil receptacles could be structurally independent of the bearings if preferred and could be attached to the bearings at the time of oiling and detached therefrom after each oiling operation if preferred, the opening into the bearing being closed in the interim by a suitable plug.

It is believed that the construction and operation of my improved lubricating system will be understood from the foregoing without further description but it should be manifest that my invention is not restricted to the details of construction illustrated and described, as these details are capable of considerable modification and variation with-

out departing from the scope of the invention as defined in the following claims.

I claim:

1. In a lubricating system, the combination of an oil receptacle having an oil-receiving opening, a valve normally closing said opening, a nozzle adapted to be detachably connected to said receptacle so as to form a tight joint with the receptacle, said nozzle having a delivery orifice arranged to aline with said opening in the receptacle when the receptacle and nozzle are connected, a valve mounted in said nozzle and constructed to be opened when the nozzle is connected to the receptacle, and means for supplying lubricant to said nozzle.

2. In a lubricating system, the combination of an oil receptacle having an oil-receiving opening, a valve normally closing said opening, a nozzle having an oil cup yieldingly mounted therein, said oil cup being provided with a delivery orifice, a valve normally closing said orifice, means whereby said nozzle and oil receptacle may be detachably connected together, and means for supplying lubricant to said oil cup.

3. In a lubricating system, the combination of an oil receptacle provided with a valved head, a nozzle provided with a bifurcated portion adapted to engage beneath said head, an oil cup yieldingly mounted in said nozzle and normally urged into engagement with said head when the parts are connected so as to form a tight joint between said head and the cup, and means for delivering lubricant through said cup to said receptacle.

4. In a lubricating system, the combination of an oil receptacle provided with a valved oil-receiving opening, a nozzle provided with a bifurcated portion and an oil cup having a discharge orifice yieldingly urged toward said bifurcated portion, a valve normally closing the discharge orifice from said cup, said valve being constructed to be opened when said nozzle is connected to said receptacle, and means for supplying lubricant to said nozzle.

5. In a lubricating system, the combination of a nozzle provided with means for detachably connecting the same to an oil receptacle, a cup yieldingly mounted in said nozzle and provided with a discharge orifice, a valve normally closing said orifice and having an extension through the orifice by which the valve is opened when the nozzle is connected to an oil receptacle, and means for supplying lubricant to said cup.

6. In a lubricating system, the combination of a nozzle comprising a yieldingly mounted oil-delivery device provided with a discharge orifice, a valve normally closing said orifice, and means for attaching said nozzle to an oil receptacle and simultaneously opening said valve.

7. In a lubricating system, the combination of a container, a flexible conduit connected to said container, a nozzle carried by the free end of said flexible conduit, a normally closed valve controlling the discharge orifice from said nozzle, and an oil receptacle constructed for detachable connection to said nozzle, said receptacle being adapted to open said nozzle valve when connection between the nozzle and said receptacle is established.

8. In a lubricating system, the combination of a container, a flexible conduit, a swivel connection between said conduit and said container, a headed oil receptacle, and a valve nozzle carried by said conduit and constructed for detachable locking connection with said oil receptacle, by movement of said nozzle transversely of the receptacle.

FRANK DREW WINKLEY.

Witnesses:
A. S. MERZ,
L. T. TIERNEY.

447

F. D. WINKLEY.

LUBRICATING SYSTEM.

APPLICATION FILED OCT. 7, 1918.

Reissued June 10, 1919.

14,667.

2 SHEETS—SHEET 1.

Fig. 1

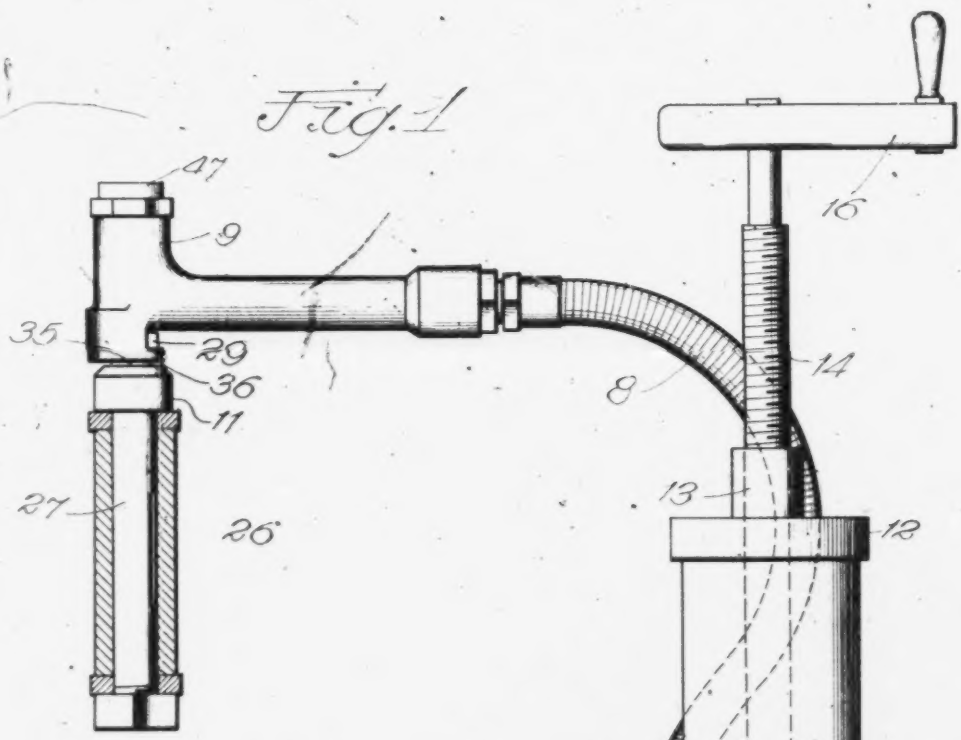


Fig. 2

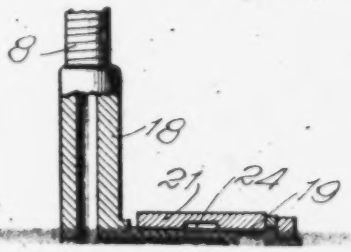


Fig. 1

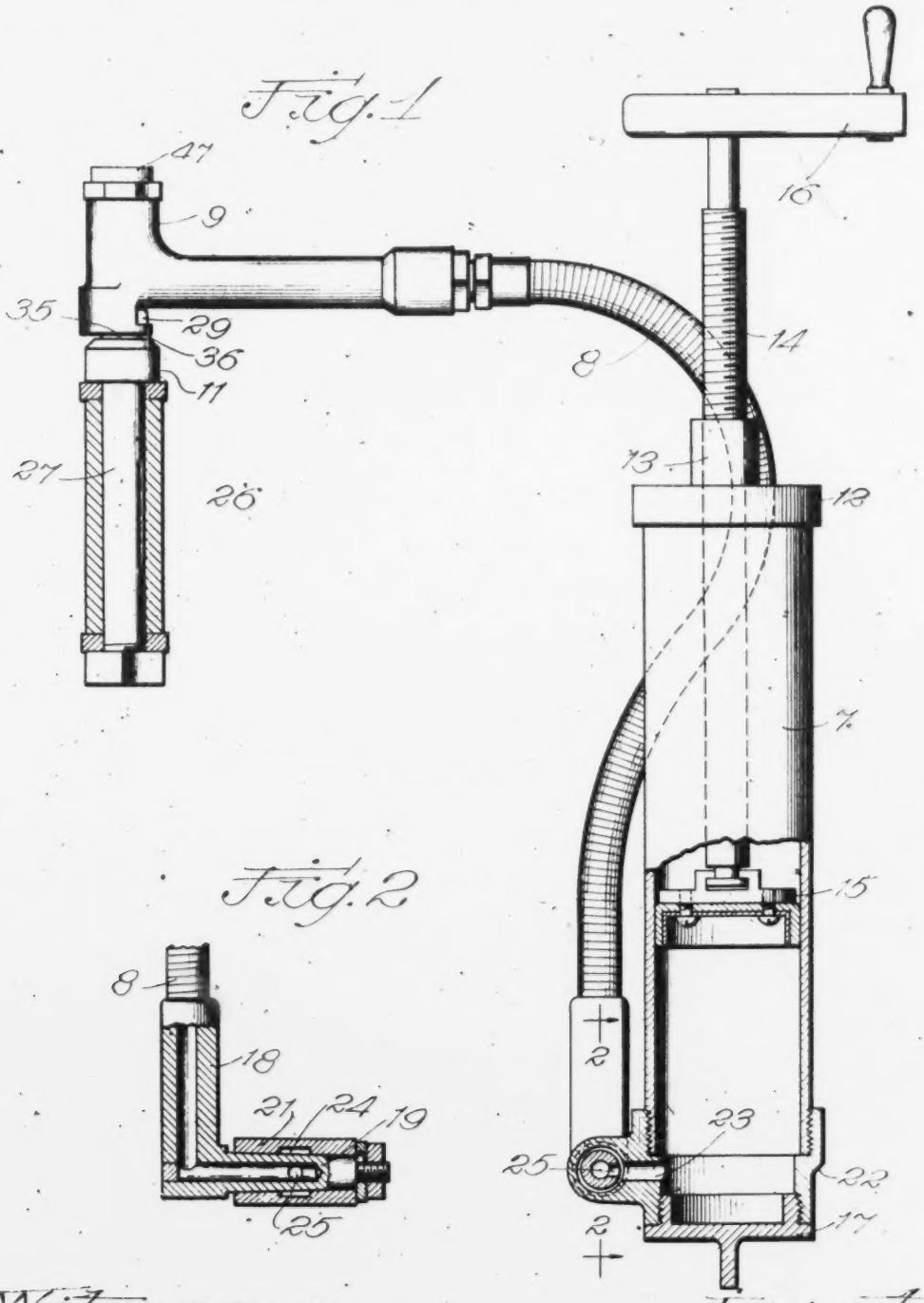


Fig. 2

Witnesses:
Andrew Winterrowd.
Earl A. Pierce

Inventor
Frank D. Winkley
By Williams, Bradbury & Lee
Attys.

F. D. WINKLEY.

LUBRICATING SYSTEM.

APPLICATION FILED OCT. 7, 1918.

Reissued June 10, 1919.

14,667.

2 SHEETS—SHEET 2.

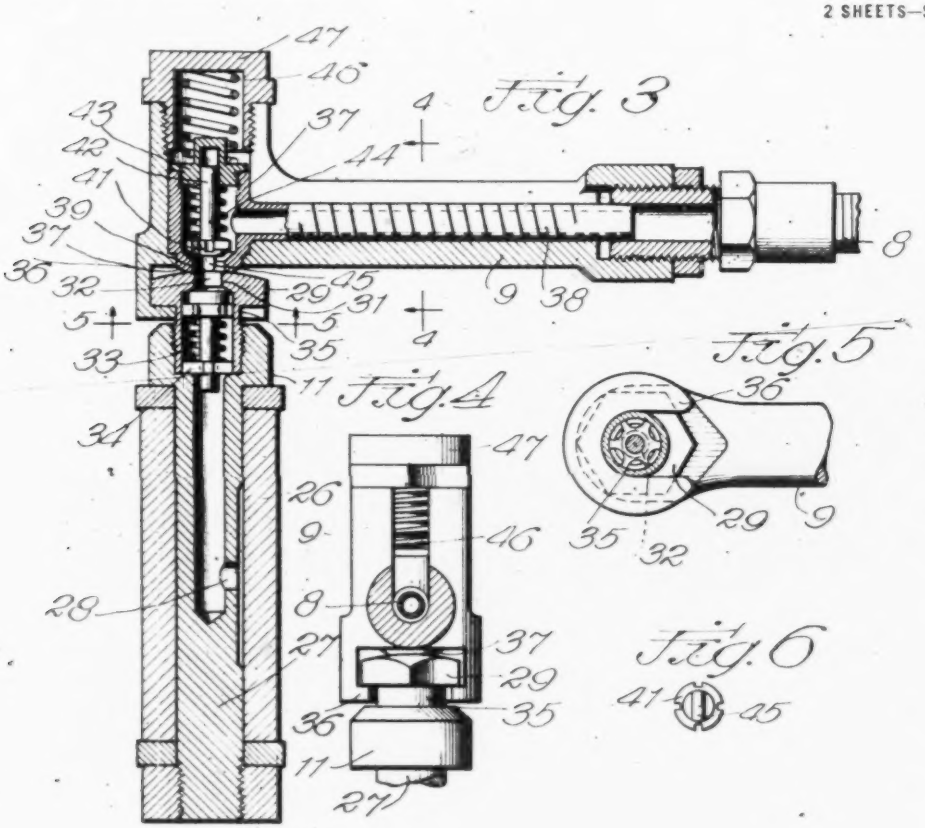


Fig. 3

Fig. 4

Fig. 5

Fig. 6

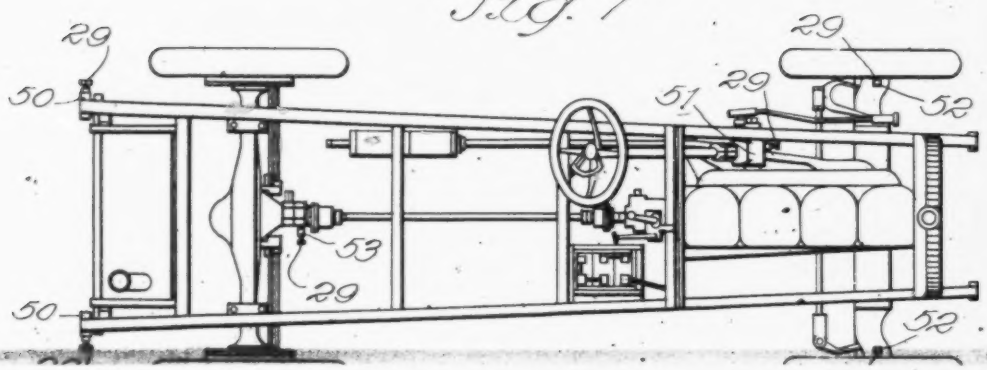
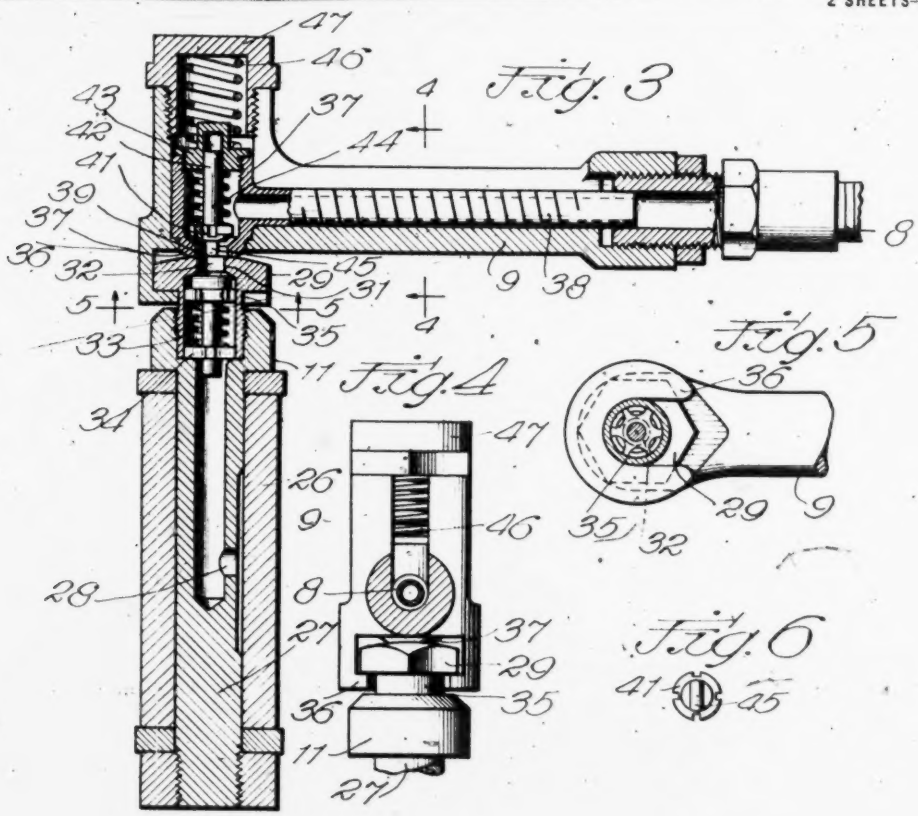
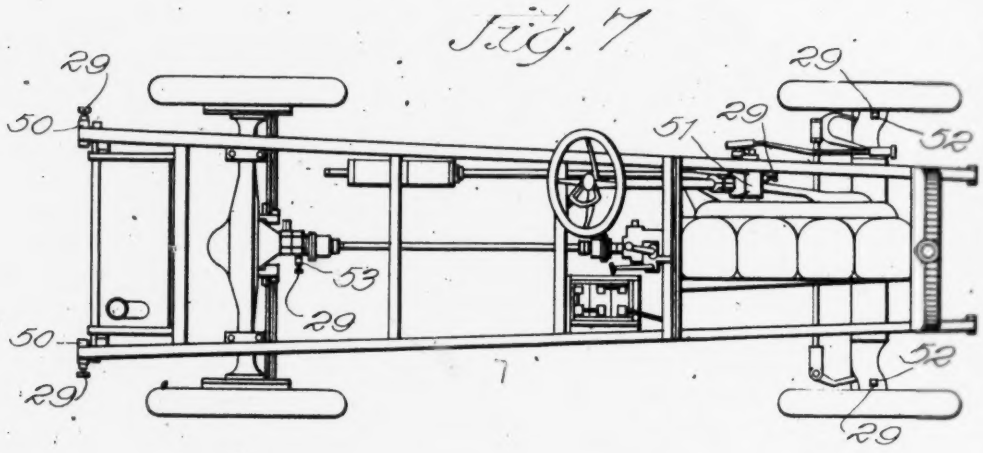


Fig. 7





Witnesses:
Andrew Wintercorn
Earl F. Pierce

Inventor
Frank D. Winkley
By Williams, Bradbury & Lee
Attys.

UNITED STATES PATENT OFFICE.

FRANK D. WINKLEY, OF MADISON, WISCONSIN.

LUBRICATING SYSTEM.

14,667. Specification for Reissued Letters Patent. Reissued June 10, 1919.

Original No. 1,201,414, dated October 17, 1916, Serial No. 94,616, filed May 1, 1916. Application for reissue filed October 7, 1918. Serial No. 257,200.

To all whom it may concern:

Be it known that I, FRANK D. WINKLEY, a citizen of the United States, residing at Madison, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Lubricating Systems, of which the following is a specification.

This invention relates in general to lubricating systems and has more particular reference to a system for lubricating the various minor bearings, such as the spring-bolts, brake-operating mechanism, steering mechanism, etc., of a motor car.

Prior to my invention it has been customary to equip the various bearings of this character with grease cups from which grease was delivered to the bearings by screwing down the cups. It has been found, however, that grease is not entirely suitable as a lubricant for bearings of this character for the reason that it soon becomes mixed with abrasions from the working surfaces and other foreign matter, and hardens so that it fills up the oil passages and prevents adequate lubrication of the parts.

My present invention is designed to provide a lubricating system in which a fluid lubricant may be employed and by which it may be readily forced into the bearings under pressure so as to insure an adequate lubrication of the working parts.

Another object of my invention is to provide an improved oil receptacle as a part of the bearing to be lubricated, and to provide an oil supply nozzle which can be readily attached to and detached from the oil receptacle, and which, when attached, will form an oil-tight joint through which oil may be forced into the receptacle and to the bearings.

Various other objects and advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following description when considered in connection with the accompanying drawings. Referring to the drawings—

Figure 1 is a side elevation partially in section, of a lubricating system embodying my invention;

Fig. 2 is a fragmentary section view on the line 2—2 of Fig. 1,

Fig. 3 is an enlarged sectional view through the nozzle and the oil receptacle,

Figs. 4 and 5 are sectional views on the lines 4—4 and 5—5 of Fig. 3,

Fig. 6 is an end view of the nozzle valve, and

Fig. 7 is a conventional plan view of an automobile chassis equipped with my lubricating system.

From the drawings it will be observed that my novel system comprises primarily an oil container or pump 7, a flexible conduit 8 equipped with a nozzle 9, and an oil receptacle 11 which forms a part of each bearing to be oiled.

More specifically the container 7 comprises a cylinder, as shown in Fig. 1, equipped at its upper end with a cap 12 having a tapped boss 13 through which the piston rod or spindle 14 is threaded. The lower end of this rod is rotatably connected to a piston or plunger 15 and the upper end is equipped with a handdle 16 by means of which the rod may be turned to move the piston longitudinally in the cylinder. The lower end of the cylinder is closed by a large removable cap 17, which may be unscrewed so that the cylinder can be filled with oil by holding it in inverted position beneath a [illegible]

Original No. 1,301,816, dated October 21, 1919.

filed October 7, 1918. Serial No. 257,200.

To all whom it may concern:

Be it known that I, FRANK D. WINKLEY, a citizen of the United States, residing at Madison, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Lubricating Systems, of which the following is a specification.

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Prior to my invention it has been customary to equip the various bearings of this character with grease cups from which grease was delivered to the bearings by screwing down the cups. It has been found, however, that grease is not entirely suitable as a lubricant for bearings of this character for the reason that it soon becomes mixed with abrasions from the working surfaces and other foreign matter, and hardens so that it fills up the oil passages and prevents adequate lubrication of the parts.

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Another object of my invention is to provide an improved oil receptacle as a part of the bearing to be lubricated, and to provide an oil supply nozzle which can be readily attached to and detached from the oil receptacle, and which, when attached, will form an oil-tight joint through which oil may be forced into the receptacle and to the bearings.

Another object of my invention is to provide a lubricating system embodying a flexible conduit and a swivel connection between the conduit and container or pressure cylinder, so that the nozzle carried by the conduit can be placed in any desired position so as to be readily attached to the oil receptacles of the various bearings on the car.

Still another object is to provide a system of this character which will be simple in construction, cheap to manufacture and easy to manipulate, and which will positively force the oil under any required pressure to the interior of the bearing to be oiled.

Various other objects and advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following description when considered in connection with the accompanying drawings. Referring to the drawings—

Figure 1 is a side elevation partially in section, of a lubricating system embodying my invention;

Fig. 2 is a fragmentary section view on the line 2—2 of Fig. 1,

Fig. 3 is an enlarged sectional view through the nozzle and the oil receptacle,

Figs. 4 and 5 are sectional views on the lines 4—4 and 5—5 of Fig. 3,

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More specifically the container 7 comprises a cylinder, as shown in Fig. 1, equipped at its upper end with a cap 12 having a tapped boss 13 through which the piston rod or spindle 14 is threaded. The lower end of this rod is rotatably connected to a piston or plunger 15 and the upper end is equipped with a handdle 16 by means of which the rod may be turned to move the piston longitudinally in the cylinder. The lower end of the cylinder is closed by a large removable cap 17, which may be unscrewed so that the cylinder can be filled with oil by holding it in inverted position beneath a faucet or other source of oil supply.

The flexible conduit 8 is connected with the container through a swivel joint which together with the flexibility of the conduit enables the nozzle 9 to be moved about to any desired position with respect to the container for attachment to the various oil receptacles on a car. By referring to Figs. 1 and 2 it will be observed that the conduit 8 emanates from a shank 18 having a laterally extending hollow trunnion 19 which is journaled in a hollow boss 21 formed integral with the bottom member 22 of the container. A passageway 23 leading from the container

into the hollow boss terminates in an annular groove 24 which communicates with the interior of the trunnion 19 through a port 25.

The bearing, designated generally by reference character 26, in which my improved oil receptacle is embodied, comprises a hollow spindle 27 having an outlet port 28 through which oil is supplied to the surfaces to be lubricated. The upper end of the spindle, instead of being equipped with a grease cup, as has been customary prior to my invention, is provided with a head 29 which is threaded into the enlarged upper end of the spindle 27. This head has an oil receiving opening 31 in its top which is normally closed so as to exclude dust and dirt by a valve 32 which is machined to snugly fit the aperture. A coiled expansion spring 33 interposed between the lower face of the valve disk and a spider 34 disposed in the lower end of the shank 35 of the head normally retains this valve in closed position. It will be observed from Fig. 3 that the upper end of the valve lies flush with the upper face of the head so that the end of a bearing equipped with my oil receptacle presents a smooth and attractive appearance which is not complicated or disfigured by any permanent grease cup.

The free end of the flexible conduit 8 is threaded into the nozzle 9 which is shaped to provide on the bottom of its outer end a bifurcated portion 36 adapted to straddle the shank 35 of the oil receptacle head and to be engaged beneath this head, as shown in Fig. 3. Within the nozzle proper there is mounted what I term an oil cup 37 which communicates with the conduit 8 through a branch conduit 38. This cup has its lower end shaped to project outwardly beyond the plane of the nozzle proper toward the bifurcated portion 36, and this lower wall of the cup is equipped with a discharge aperture 39 which is normally closed by a valve 41 carried on a stem 42 which extends upwardly into a cap 43 threaded into the upper end of the cup. An expansion spring 44 surrounding the stem normally holds the valve in closed position, and when closed an exten- [illegible] threaded into the top of the nozzle body. The lower end of the cup is therefore held in its lowermost position and the valve is normally maintained in closed position by the spring 44.

When it is desired to use my improved system the nozzle is attached to the head of the oil receptacle to which it is desired to deliver lubricant by engaging the bifurcated portion 36 of the nozzle beneath the head and sliding the nozzle transversely of the head or toward the right, viewing Fig. 3, into the position shown in this figure. The engagement of the extension 45 with the top of the head will open the valve 41 and the cup will yield upwardly against the spring 46 sufficiently to accommodate the device to heads of various thicknesses, but this spring will hold the bottom of the cup snugly against the head of the oil receptacle so as to provide an oil-tight joint at this point. After the nozzle has been attached the handle 16 is turned to force the plunger 15 downwardly in the container, thereby forcing oil under pressure through the conduit into the oil cup 36 and downwardly into the oil receptacle, the valve 32 in the receptacle being opened against the force of the spring 33 by the pressure of the inflowing oil. When sufficient lubricant has been delivered to the bearing a partial reverse rotation of the handle 16 will relieve the pressure in the cup and permit the valve 32 to close. The nozzle may then be detached from the head by slipping it off laterally, and as soon as the pressure against the extension 45 is released the valve 41 will be closed by its spring 44.

In Fig. 7 I have illustrated a conventional form of an automobile chassis equipped with my lubricating system. In this figure the spring-bolts 50, steering mechanism 51, steering knuckles 52, and propeller shaft bearing 53 are shown equipped with my lubricant heads 29. It is, of course, obvious that these lubricating heads may be used at any other points on the machine where it is desired to supply a lubricant to a bearing.

It will be obvious from the foregoing that I have provided a lubricating system in which the discharge nozzle can be very quickly attached to and detached from an

through which oil is supplied to the surfaces to be lubricated. The upper end of the spindle, instead of being equipped with a grease cup, as has been customary prior to my invention, is provided with a head 29 which is threaded into the enlarged upper end of the spindle 27. This head has an oil receiving opening 31 in its top which is normally closed so as to exclude dust and dirt by a valve 32 which is machined to snugly fit the aperture. A coiled expansion spring 33 interposed between the lower face of the valve disk and a spider 34 disposed in the lower end of the shank 35 of the head normally retains this valve in closed position. It will be observed from Fig. 3 that the upper end of the valve lies flush with the upper face of the head so that the end of a bearing equipped with my oil receptacle presents a smooth and attractive appearance which is not complicated or disfigured by any permanent grease cup.

The free end of the flexible conduit 8 is threaded into the nozzle 9 which is shaped to provide on the bottom of its outer end a bifurcated portion 36 adapted to straddle the shank 35 of the oil receptacle head and to be engaged beneath this head, as shown in Fig. 3. Within the nozzle proper there is mounted what I term an oil cup 37 which communicates with the conduit 8 through a branch conduit 38. This cup has its lower end shaped to project outwardly beyond the plane of the nozzle proper toward the bifurcated portion 36, and this lower wall of the cup is equipped with a discharge aperture 39 which is normally closed by a valve 41 carried on a stem 42 which extends upwardly into a cap 43 threaded into the upper end of the cup. An expansion spring 44 surrounding the stem normally holds the valve in closed position, and when closed an extension 45 beneath the valve disk projects downwardly beyond the bottom of the cup. It will be observed from Fig. 6 that this extension 45 extends diametrically entirely across the discharge aperture 39 and is wider than the oil-receiving aperture 31 in the head 29 so that it will engage the head on both sides of the aperture when the nozzle is connected to the head.

The oil cup 37 is yieldingly mounted in the nozzle proper and is held downwardly therein with its bottom projecting beyond the plane of the nozzle proper by a relatively stiff expansion spring 46 interposed between the cap 43 of the cup and a cap 47

liver lubricant by engaging the bifurcated portion 36 of the nozzle beneath the head and sliding the nozzle transversely of the head or toward the right, viewing Fig. 3, into the position shown in this figure. The engagement of the extension 45 with the top of the head will open the valve 41 and the cup will yield upwardly against the spring 46 sufficiently to accommodate the device to heads of various thicknesses, but this spring will hold the bottom of the cup snugly against the head of the oil receptacle so as to provide an oil-tight joint at this point. After the nozzle has been attached the handle 16 is turned to force the plunger 15 downwardly in the container, thereby forcing oil under pressure through the conduit into the oil cup 36 and downwardly into the oil receptacle, the valve 32 in the receptacle being opened against the force of the spring 33 by the pressure of the inflowing oil. When sufficient lubricant has been delivered to the bearing a partial reverse rotation of the handle 16 will relieve the pressure in the cup and permit the valve 32 to close. The nozzle may then be detached from the head by slipping it laterally, and as soon as the pressure against the extension 45 is released the valve 41 will be closed by its spring 44.

In Fig. 7 I have illustrated a conventional form of an automobile chassis equipped with my lubricating system. In this figure the spring-bolts 50, steering mechanism 51, steering knuckles 52, and propeller shaft bearing 53 are shown equipped with my lubricant heads 29. It is, of course, obvious that these lubricating heads may be used at any other points on the machine where it is desired to supply a lubricant to a bearing.

It will be obvious from the foregoing that I have provided a lubricating system in which the discharge nozzle can be very quickly attached to and detached from an oil-receiving receptacle of simple and economical construction, that the oil can be forced by my system positively into the receptacle and bearing in any desired quantities, and that when the system is not in use all leakage is precluded since the valve 41 is maintained at all times against its seat except when positively unseated by the act of attaching the nozzle to a properly constructed head. While I prefer to equip the bearings to be lubricated with oil receptacles of the character described, to which my improved nozzle may be detachably connected, it should be obvious that the oil re-

ceptacles could be structurally independent of the bearings if preferred and could be attached to the bearings at the time of oiling and detached therefrom after each oiling operation if preferred, the opening into the bearing being closed in the interim by a suitable plug.

It is believed that the construction and operation of my improved lubricating system will be understood from the foregoing without further description. While I have described my invention as particularly useful for supplying fluid lubricants to the bearings of mechanism it is, of course, obvious and to be understood that my invention is not limited to the use of the more fluid lubricants but can be employed for delivering any of the less fluid lubricants to a bearing. It is only necessary that the lubricant be sufficiently fluid to permit it to be discharged from the pump or container 7 into the head or receptacle 29. It should be also manifest that my invention is not restricted to the details of construction illustrated and described, as these details are capable of considerable modification and variation without departing from the scope of the invention as defined in the following claims:

I claim:

1. In a lubricating system, the combination of an oil receptacle having an oil-receiving opening, a valve normally closing said opening, a nozzle adapted to be detachably connected to said receptacle so as to form a tight joint with the receptacle, said nozzle having a delivery orifice arranged to aline with said opening in the receptacle when the receptacle and nozzle are connected, a valve mounted in said nozzle and constructed to be opened when the nozzle is connected to the receptacle, and means for supplying lubricant to said nozzle.

2. In a lubricating system, the combination of an oil receptacle having an oil-receiving opening, a valve normally closing said opening, a nozzle having an oil cup yieldingly mounted therein, said oil cup being provided with a delivery orifice, a valve normally closing said orifice, means whereby

tion of an oil receptacle provided with a valved oil-receiving opening, a nozzle provided with a bifurcated portion having a discharge orifice and an oil cup yieldingly urged toward said bifurcated portion, a valve normally closing the discharge orifice from said cup, said valve being constructed to be opened when said nozzle is connected to said receptacle, and means for supplying lubricant to said nozzle.

5. In a lubricating system, the combination of a nozzle provided with means for detachably connecting the same to an oil receptacle, a cup yieldingly mounted in said nozzle and provided with a discharge orifice, a valve normally closing said orifice and having an extension through the orifice by which the valve is opened when the nozzle is connected to an oil receptacle, and means for supplying lubricant to said cup.

6. In a lubricating system, the combination of a nozzle comprising a yieldingly mounted oil-delivery device provided with a discharge orifice, a valve normally closing said orifice, and means for attaching said nozzle to an oil receptacle and simultaneously opening said valve.

7. In a lubricating system, the combination of a container, a flexible conduit connected to said container, a nozzle carried by the free end of said flexible conduit, a normally closed valve controlling the discharge orifice from said nozzle, and an oil receptacle constructed for detachable connection to said nozzle, said receptacle being adapted to open said nozzle valve when connection between the nozzle and said receptacle is established.

8. In a lubricating system, the combination of a container, a flexible conduit, a swivel connection between said conduit and said container, a headed oil receptacle, and a valve nozzle carried by said conduit and constructed for detachable locking connection with said oil receptacle by movement of said nozzle transversely of the receptacle.

9. The combination with a lubricant receptacle, of means for supplying lubricant thereto comprising a conduit, coacting means on said receptacle and said conduit

tion of my improved lubricating system will be understood from the foregoing without further description. While I have described my invention as particularly useful for supplying fluid lubricants to the bearings of mechanism it is, of course, obvious and to be understood that my invention is not limited to the use of the more fluid lubricants but can be employed for delivering any of the less fluid lubricants to a bearing. It is only necessary that the lubricant be sufficiently fluid to permit it to be discharged from the pump or container 7 into the head or receptacle 29. It should be also manifest that my invention is not restricted to the details of construction illustrated and described, as these details are capable of considerable modification and variation without departing from the scope of the invention as defined in the following claims.

I claim:

1. In a lubricating system, the combination of an oil receptacle having an oil-receiving opening, a valve normally closing said opening, a nozzle adapted to be detachably connected to said receptacle so as to form a tight joint with the receptacle, said nozzle having a delivery orifice arranged to aline with said opening in the receptacle when the receptacle and nozzle are connected, a valve mounted in said nozzle and constructed to be opened when the nozzle is connected to the receptacle, and means for supplying lubricant to said nozzle.

2. In a lubricating system, the combination of an oil receptacle having an oil-receiving opening, a valve normally closing said opening, a nozzle having an oil cup yieldingly mounted therein, said oil cup being provided with a delivery orifice, a valve normally closing said orifice, means whereby said nozzle and oil receptacle may be detachably connected together, and means for supplying lubricant to said oil cup.

3. In a lubricating system, the combination of an oil receptacle provided with a valved head, a nozzle provided with a bifurcated portion adapted to engage beneath said head, an oil cup yieldingly mounted in said nozzle and normally urged into engagement with said head when the parts are connected so as to form a tight joint between said head and the cup, and means for delivering lubricant through said cup to said receptacle.

4. In a lubricating system, the combination of a nozzle, a receptacle, and means for supplying lubricant to said nozzle.

5. In a lubricating system, the combination of a nozzle provided with means for detachably connecting the same to an oil receptacle, a cup yieldingly mounted in said nozzle and provided with a discharge orifice, a valve normally closing said orifice and having an extension through the orifice by which the valve is opened when the nozzle is connected to an oil receptacle, and means for supplying lubricant to said cup.

6. In a lubricating system, the combination of a nozzle comprising a yieldingly mounted oil-delivery device provided with a discharge orifice, a valve normally closing said orifice, and means for attaching said nozzle to an oil receptacle and simultaneously opening said valve.

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9. The combination with a lubricant receptacle, of means for supplying lubricant thereto comprising a conduit, coacting means on said receptacle and said conduit for detachably connecting one end of said conduit with said lubricant receptacle comprising two relatively movable parts, one of said parts serving to secure said conduit to said receptacle and the other of said parts sealing the joint between said conduit and said receptacle, and means connected with the other end of said conduit for supplying lubricant thereto.

10. The combination with a lubricant receptacle, of means for supplying lubricant thereto comprising a conduit, means for detachably connecting one end of said conduit with said receptacle comprising a member secured to said conduit and a second mem-

ber movable relatively to said first named member for contacting with an outer surface of said receptacle to maintain a fluid tight connection between said receptacle and said conduit.

11. The combination with a mechanism comprising a variety of bearings located at different points thereof, each bearing being provided with an aperture for receiving lubricant, of means for supplying lubricant to said apertures comprising a flexible conduit, means for successively attaching one end of said conduit with said apertures, and means for supplying lubricant under pressure to the other end of said conduit.

12. The combination with a lubricant receptacle of means for supplying lubricant thereto, under pressure, comprising a conduit having means for detachably securing it to said receptacle, a perforated member yieldably mounted in said first-named means for contacting with one end of said receptacle to seal the connection between said conduit and said receptacle, and spring means for yieldingly holding said yieldably-mounted means in contact with said receptacle

13. The combination with a lubricant receptacle of means for supplying lubricant thereto under pressure, comprising a conduit having means for detachably securing it to said receptacle, a perforated member yieldably mounted in said first-named means, for contacting with said receptacle to seal the connection between said conduit and said receptacle, and spring means for yieldingly holding said yieldably-mounted means in contact with said receptacle.

14. The combination with a lubricant receptacle of means for supplying lubricant thereto under pressure, comprising a conduit having means for detachably securing it to said receptacle, and a perforated member yieldably mounted in said first-named means for contacting with said receptacle to seal the connection between said conduit and said receptacle.

15. The combination with a lubricant receptacle of means for supplying lubricant thereto under pressure comprising a conduit having means for detachably securing it to said receptacle, and a yieldable member for contacting with said receptacle and sealing the connection between said receptacle and said conduit.

16. The combination with a mechanism comprising a variety of bearings located at different points thereof, each bearing being provided with a lubricant receptacle, of means for supplying lubricant to said receptacles comprising a flexible conduit, means for successively attaching one end of said conduit with said receptacles, and means for supplying lubricant to the other end of said conduit under pressure.

17. The combination with a mechanism comprising a variety of bearings located at different points thereof and at different angles, each bearing being provided with an aperture for receiving lubricant, of means for supplying lubricant to said apertures comprising a conduit adapted to be flexed to reach the said apertures, quick detachable means for successively attaching one end of said conduit with said apertures comprising means for sealing the connection between said conduit and said bearings against the escape of lubricant, and means attached to the other end of said conduit for supplying lubricant thereto under pressure.

FRANK D. WINKLEY.

NO. 1,301,733

INVENTOR

A. V. Gulborg

PATENTED

June 24, 1919

453.

A. V. GULLBORG.

LUBRICATING APPARATUS.

APPLICATION FILED FEB. 11, 1918.

1,307,733.

Patented June 24, 1919.

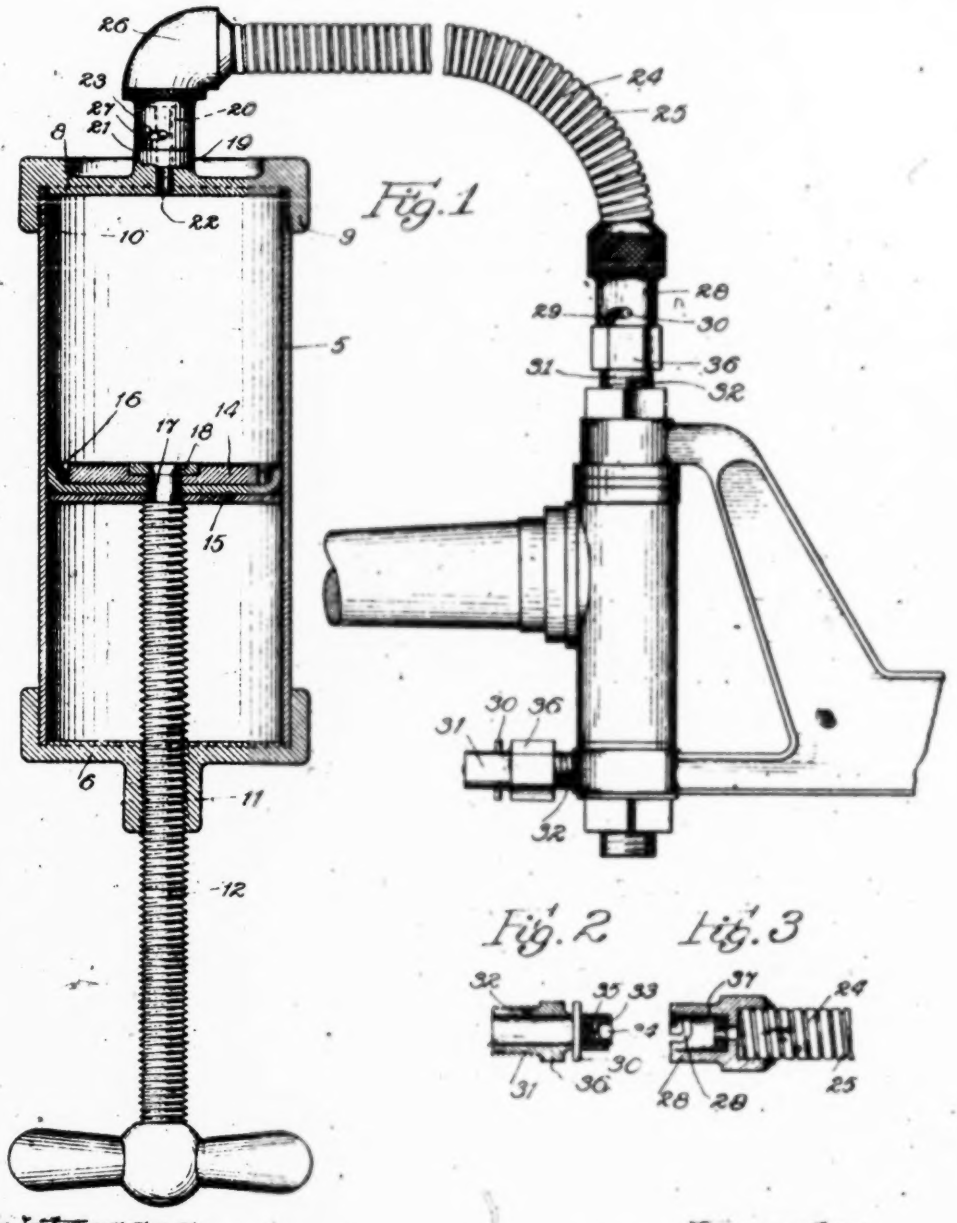

Fig. 1

Fig. 2

Fig. 3

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UNITED STATES PATENT OFFICE.

ARTHUR V. GULLBORG, OF CHICAGO, ILLINOIS.

LUBRICATING APPARATUS.

1,307,733. Specification of Letters Patent. Patented June 24, 1919.

Application filed February 11, 1918. Serial No. 216,586.

To all whom it may concern:

Be it known that I, ARTHUR V. GULLBORG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Lubricating Apparatus, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to lubricating apparatus and is particularly concerned with the provision of means for supplying lubricating grease to bearings which are more or less inaccessible. One object of my invention is to provide means of the character described comprising a novel grease pump which coöperates with a grease cup of novel construction to entirely fill the grease cup without wasting any of the lubricating grease. Another object of my invention is to provide a grease pump having a flexible discharge conduit. A still further object of my invention is to provide a grease pump having a flexible discharge conduit provided with means for interchangeably locking either end thereof to said grease pump or to the grease cups which are being filled by the grease pump, and a still further object is to provide a flexible discharge conduit for my improved grease pump one end of said conduit being provided with a straight coupling and the other end thereof being provided with an L-shaped coupling, whereby, by the use of either one or the other of these couplings it is possible to obtain access to grease cups in comparatively inaccessible places. Other objects, adaptabilities, and capabilities will appear as the description progresses, reference being had to the accompanying drawings, in which—

Figure 1 illustrates my improved grease pump supplying grease to one of my novel grease cups, the grease pump being shown partially in longitudinal section. In this view my improved grease cups are shown applied to a steering knuckle of an automobile, the latter being shown in fragmentary section; Fig. 2 is a detail view of the flexible discharge conduit of my improved grease pump; Fig. 3 is a detail view of the L-shaped coupling member; Fig. 4 is a detail view of the straight coupling member; Fig. 5 is a detail view of the grease cup; Fig. 6 is a detail view of the grease cup cover; Fig. 7 is a detail view of the grease cup plunger; Fig. 8 is a detail view of the grease cup plunger spring; Fig. 9 is a detail view of the grease cup plunger spring retaining washer; Fig. 10 is a detail view of the grease cup plunger spring retaining pin; Fig. 11 is a detail view of the grease cup plunger spring retaining pin washer; Fig. 12 is a detail view of the grease cup plunger spring retaining pin washer retaining cotter pin; Fig. 13 is a detail view of the grease cup plunger spring retaining pin washer retaining cotter pin; Fig. 14 is a detail view of the grease cup plunger spring retaining pin washer retaining cotter pin; Fig.

Application filed February 11, 1918. Serial No. 216,586.

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Figure 1 illustrates my improved grease pump supplying grease to one of my novel grease cups, the grease pump being shown partially in longitudinal section. In this view my improved grease cups are shown applied to a steering knuckle of an automobile;

Fig. 2 is a longitudinal section through my improved grease cup: and

Fig. 3 is a longitudinal section through one of the coupling members.

Referring to the drawings, the reference character 5 indicates the barrel of my improved grease pump, one end of which is closed by a head 6, which may be soldered or otherwise secured to the end of the barrel. The opposite end of the barrel is closed by the head 8, which has an internally threaded flange 9 for receiving the external threads 10 on the end of the barrel. The head 6 is provided with a central boss 11, which is provided with a screwthreaded bore for receiving the screwthreaded piston rod 12. The rod 12 is provided with a handle 13 for rotating the same. The inner end of the rod 12 has a piston mounted thereon which comprises the spaced disks 14 and 15 between which is confined the cup leather 16, the two disks 14 and 15 and the cup leather being rotatably mounted upon the reduced end 17 of the piston rod and retained in place by means of a washer 18, through which the end of the piston rod extends and is riveted over to secure the washer thereto.

The head 8 is provided with a central boss 19 having a reduced portion 20, shown in dotted lines in Fig. 1, forming a shoulder 21 and a discharge opening 22 formed therethrough. A pin 23 extends through the reduced portion 20 and from both sides thereof. The discharge conduit 24 is formed from a piece of flexible duct, preferably comprising an outer spiral metallic rib 25. There are numerous flexible ducts in commercial use which may be employed for this part of my invention, and further description thereof appears to be unnecessary. At one end of the duct 24 I provide an L-shaped coupling 26 having bayonet slots 27, one of which is not shown, which co-act with the opposite ends of the pin 23 to secure the coupling to the pump. The opposite end of the conduit 24 is provided with a straight coupling 28 having bayonet slots 29, one of which is not shown, for co-acting with the opposite ends of the pin 30 of my novel grease cup.

From the above description it will be clear that either coupling member can be connected with either the pump or with the grease cup. By using the L-shaped coupling for connecting with the grease cup it is sometimes possible to gain access to a grease cup which would not otherwise be accessible.

My novel grease cup comprises a tubular member 31 having the screwthreads 32 at one end thereof for securing them to a bearing, and the other end thereof being flanged inwardly as shown at 33, for the purpose of

providing a seat for the ball closure 34. This closure is urged against its seat by means of a compression spring 35, which is confined between the pin 30 and the closure 34. The central portion of my grease cup is hexagonal in cross section, as indicated at 36, thereby providing means for receiving the jaws of a wrench to screw the cup into place.

In Fig. 3 the reference character 37 indicates a gasket made of felt or other suitable material for sealing the connection between the coupling and the grease cup. From this construction it will be seen that when the coupling member is secured to the grease cup by means of the bayonet connection, there will be no chance for the grease to escape between these two members when the piston rod 12 is rotated to force the piston inwardly, and thereby force the grease into the grease cup. This is an improved feature of my invention, for the reason that in prior grease pumps with which I am acquainted, no means has been provided for locking the discharge end of the nozzle to the grease cup, and consequently, if more grease than is necessary to fill the grease cup is forced through the nozzle, the excess quantity of grease merely overflows the edge of the grease cup and is wasted. With my improved construction there is no chance for grease being wasted in this manner. Furthermore, it is possible completely to fill the grease cup with grease, which is a result impossible of being obtained with the old type of grease pumps for the reason that by the use of these pumps more or less air always became entrapped in the grease.

Another advantage of my construction lies in the fact that after the coupling member of my grease pump has been connected with the grease cup, the pump can be operated without paying any attention to the location of the grease cup.

While I have disclosed the preferred embodiment of my invention, it is to be understood that it is not limited to the details of the structure described, but is capable of other adaptations and modifications within the scope of the appended claims, some of which are broad enough to include constructions in which the grease cups are entirely dispensed with and means are provided for detachably connecting the grease pump with

I claim as new and desire to secure by Letters Patent of the United States is:

1. The combination with a grease pump having a discharge opening and a flexible discharge conduit provided at one end with a straight coupling and at the other end with an L-shaped coupling, of a grease cup and means on said grease pump and grease cup for co-acting with said couplings to interchangeably connect either end of said conduit with said pump and cup respectively.

2. The combination with a grease pump having a discharge opening and a discharge conduit provided at one end with a straight coupling and at the other end with an L-shaped coupling, of a grease cup and means on said grease pump and grease cup for co-acting with said couplings to interchangeably connect either end of said conduit with said pump and cup respectively.

3. A grease cup comprising a tubular member having screwthreads at one end and having the other end flanged inwardly to provide a closure seat, a closure, a pin extending through said tubular member and on both sides thereof, and a spring confined between said pin and closure and tending to hold said closure on said seat.

4. A grease cup comprising a tubular member having one end flanged inwardly to provide a closure seat, a closure, a pin extending through said tubular member and on both sides thereof, and a spring confined between said pin and closure and tending to hold said closure on said seat.

5. A grease cup comprising a tubular member having one end flanged inwardly to provide a closure seat, a closure, a pin extending inwardly and outwardly from one wall of said tubular member, and a spring confined between the inner end of said pin and said closure to hold said closure on its seat.

6. A grease pump having a discharge opening in combination with a discharge conduit having a straight coupling member at one end and an L-shaped coupling member at the other end, said couplings and pump being provided with co-acting means for connecting either of said couplings with said pump.

In witness whereof, I hereunto subscribe my name this 1st day of February, 1918.

ARTHUR V. GULLBORG.

confined between the pin 33 and the closure 34. The central portion of my grease cup is hexagonal in cross section, as indicated at 36, thereby providing means for receiving the jaws of a wrench to screw the cup into place.

In Fig. 3 the reference character 37 indicates a gasket made of felt or other suitable material for sealing the connection between the coupling and the grease cup. From this construction it will be seen that when the coupling member is secured to the grease cup by means of the bayonet connection, there will be no chance for the grease to escape between these two members when the piston rod 12 is rotated to force the piston inwardly, and thereby force the grease into the grease cup. This is an improved feature of my invention, for the reason that in prior grease pumps with which I am acquainted, no means has been provided for locking the discharge end of the nozzle to the grease cup, and consequently, if more grease than is necessary to fill the grease cup is forced through the nozzle, the excess quantity of grease merely overflows the edge of the grease cup and is wasted. With my improved construction there is no chance for grease being wasted in this manner. Furthermore, it is possible completely to fill the grease cup with grease, which is a result impossible of being obtained with the old type of grease pumps for the reason that by the use of these pumps more or less air always became entrapped in the grease.

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While I have disclosed the preferred embodiment of my invention, it is to be understood that it is not limited to the details of the structure described, but is capable of other adaptations and modifications within the scope of the appended claims, some of which are broad enough to include constructions in which the grease cups are entirely dispensed with and means are provided for detachably connecting the grease pump with members having apertures formed therein for conveying grease to the parts to be lubricated.

Having thus described my invention, what

having a discharge opening and a flexible discharge conduit provided at one end with a straight coupling and at the other end with an L-shaped coupling, of a grease cup and means on said grease pump and grease cup for co-acting with said couplings to interchangeably connect either end of said conduit with said pump and cup respectively.

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6. A grease pump having a discharge opening in combination with a discharge conduit having a straight coupling member at one end and an L-shaped coupling member at the other end, said couplings and pump being provided with co-acting means for connecting either of said couplings with said pump.

In witness whereof, I hereunto subscribe my name this 1st day of February, 1918.

ARTHUR V. GULLBORG.

Witnesses:
H. M. CAULTIS,
OSCAR RAHM.

456

C. SENG.

PIPE COUPLING.

APPLICATION FILED DEC. 23, 1915.

1,322,357.

Patented Nov. 18, 1919.

Fig. 1.

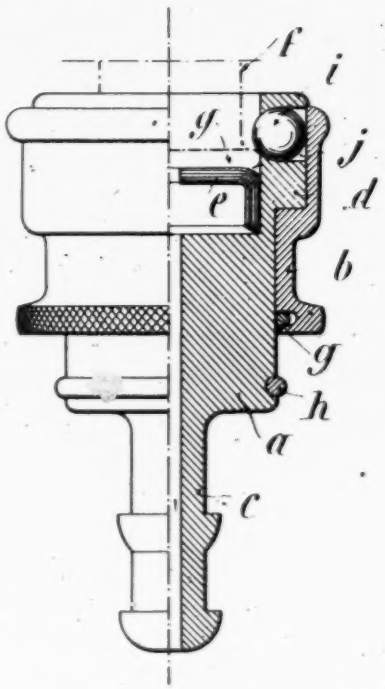


Fig. 4.

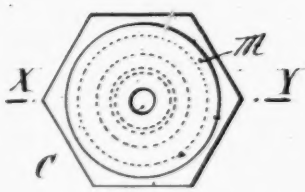


Fig. 3.

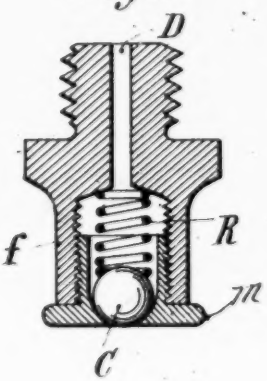


Fig. 2.

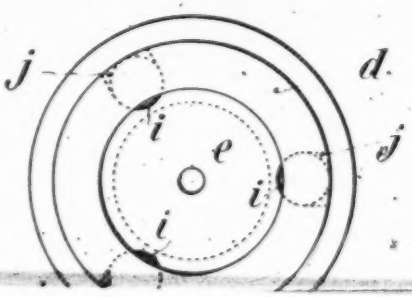


Fig. 1.

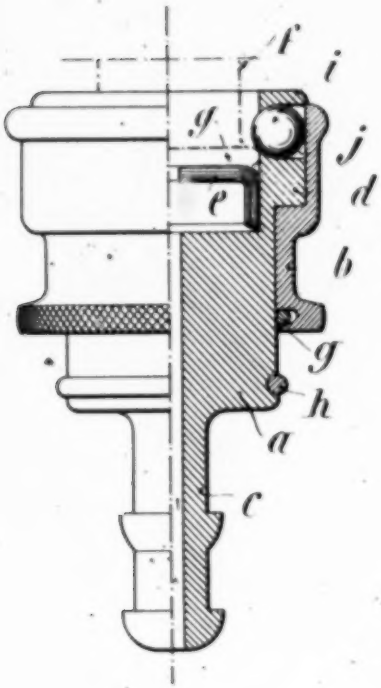


Fig. 4.

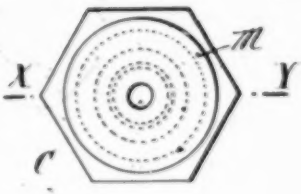


Fig. 3.

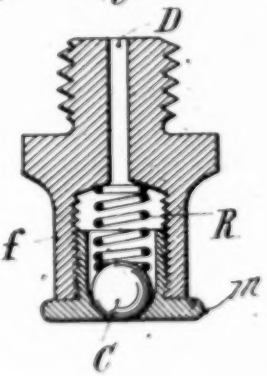
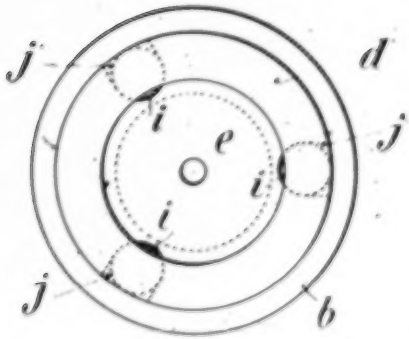


Fig. 2.



Inventor:
Camille Seng.
by Haselton, Lake & Co.
atty.

UNITED STATES PATENT OFFICE.

CAMILLE SENG, OF ROMILLY-SUR-SEINE, FRANCE.

PIPE-COUPLING.

REISSUED

1,322,357. Specification of Letters Patent. Patented Nov. 18, 1919.

Application filed December 23, 1915. Serial No. 68,431.

To all whom it may concern:

Be it known that I, CAMILLE SENG, a citizen of the French Republic, and a resident of Romilly-sur-Seine, Department of the Aube, in the Republic of France, have invented certain new and useful Improvements in Pipe-Couplings, of which the following is a specification, reference being had therein to the accompanying drawing.

The present invention relates to an instantaneous joint for fluids under pressure, characterized essentially by the fact that both parts of the joint are connected or separated from each other by the longitudinal displacement, upon one of the said parts, of a controlling sleeve intended to operate balls; these means being adapted to engage or not with the other part of the joint which, to this end, is provided with a connecting flange or the like means. The joint may, more particularly, be constituted by a body comprising a chamber within which the other part of the joint may be introduced, which rests or bears on a resilient packing insuring fluid-tightness of the joint. The connection is effected by means of balls which project into the said chamber and are located in recesses formed in the joint; the said balls actuated in opposition to their active connecting parts by means of the controlling sleeve without the assistance of intermediate members.

This instantaneous joint is more particularly applied in the case where it is desired to have forced lubrication with oil, grease and so on. In this case the joint which is connected to the piping of the delivery mechanism of a pump or the like, may be secured as desired by the operation of the sleeve actuating the balls upon the connecting flange with which the lubricator must be provided for that purpose. This flange may be formed upon the cap which closes the lubricator and which comprises an open-

a constructional form of ball lubricator which has been more particularly designed for use in conjunction with the instantaneous joint in the case of forced lubrication.

This new joint consists of a tubular body *a*, and an operating or controlling sleeve *b* adapted to slide on the said body *a*.

At one of its ends, the body *a* is constructed so as to form a pipe *c* intended to receive the pipe connecting the joint with the supply apparatus, such as lubricator, pump or other apparatus. At its opposite end, the body *a* forms a hollow head *d* having seated therein a fluid-tight washer *e* constituted by a piece of cupped leather, against which bears the end of the pipe *f* of the working apparatus to be connected. This pipe *f* comprises at its end a small flange *g* adapted to engage with a certain number of balls *i* (three in the illustrated example), arranged at equal distances from one another in radial recesses *j* formed in the head *d*.

The thickness of the annular portion of the head *d* and the diameter of the balls *i* are designed in such a manner that the said balls project into the interior of the recess formed in the head *d* when, the sleeve *b* being operated, these balls bear against the inner wall of the said sleeve.

A split ring *h* located in a groove formed in the body *a* projects around the latter in order to limit the travel of the sleeve *b*. This travel is designed in such a manner that when the sleeve *b* is drawn to the rear it permits of the disengagement of the balls *i* but sufficiently covers the recesses *j* to prevent the said balls from dropping out.

Under these conditions, in order to connect the tubular body *a* with the pipe *f* it is sufficient, after having previously displaced the sleeve *b* to the rear, to introduce the said pipe *f* into the head *d* so that the small flange *g* will bear against the washer *e*, be-

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The accompanying drawings illustrate, by way of example, a constructional form of the invention.

Figure 1 shows partly in elevation and partly in vertical section, a constructional form of the instantaneous joint forming the subject matter of the invention.

Fig. 2 is a corresponding sectional plan.

Figs. 3 and 4 show in vertical section taken on line X Y and in plan, respectively, a constructional form of ball fastener which has been more particularly designed for use in conjunction with the instantaneous joint in the case of forced lubrication.

This new joint consists of a tubular body *a*, and an operating or controlling sleeve *b* adapted to slide on the said body *a*.

At one of its ends, the body *a* is constructed so as to form a pipe *c* intended to receive the pipe connecting the joint with the supply apparatus, such as lubricator, pump or other apparatus. At its opposite end, the body *a* forms a hollow head *d* having seated therein a fluid-tight washer *e* constituted by a piece of cupped leather, against which bears the end of the pipe *f* of the working apparatus to be connected. This pipe *f* comprises at its end a small flange *g* adapted to engage with a certain number of balls *i* (three in the illustrated example), arranged at equal distances from one another in radial recesses *j* formed in the head *d*.

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A split ring *h* located in a groove formed in the body *a* projects around the latter in order to limit the travel of the sleeve *b*. This travel is designed in such a manner that when the sleeve *b* is drawn to the rear it permits of the disengagement of the balls *i* but sufficiently covers the recesses *j* to prevent the said balls from dropping out.

Under these conditions, in order to connect the tubular body *a* with the pipe *f* it is sufficient, after having previously displaced the sleeve *b* to the rear, to introduce the said pipe *f* into the head *d* so that the small flange *g* will bear against the washer *e*, between the latter and the balls *i*. As soon as the parts are in such contact, the sleeve *b* is pushed. This movement has for its effect to cause the balls *i* to converge toward the axis of the joint so that they will slide against the rear portion of the flange and cause the same to bear with pressure against the fluid-tight washer *e*.

In order to disengage the joint it is sufficient to draw the sleeve *b* to the rear.

In this new joint, the engaging and disengaging operations may be performed very

easily by means of one hand only, the only movement to be effected consisting in sliding in a straight line the sleeves *b* on the body *a*, which movement takes place by itself under the effect of the introduction or withdrawal of the joint.

This instantaneous joint which may be used for insuring the junction of the two conduits wherein any fluid circulates and in particular, wherein any fluid under pressure circulates, may be used particularly in the case of forced lubrication with oil or grease. To this end recourse may be had to a ball lubricator forming an obturator and comprising an external flange for securing and fixing the joint.

Referring to Figs. 3 and 4, this lubricator is constituted by a hollow body *f* formed with a conduit D for the lubricant. A screw-threaded extension permits of placing the lubricator in place. In the chamber within the body *f* which is formed with a screw-thread, a plug *m* is screwed, provided with the flange against which the balls *i* are designed to engage, so as to effect a joint with the pump intended to deliver the lubricant. In the illustrated example, the plug *m*, is, moreover, hollowed out internally so as to receive a ball C constantly pushed against its seat by an inner spring R thus insuring closure of the lubricator.

It should be noted that the pressure of the fluid exerts itself within the chamber formed by the piece of cupped leather *e* in the direction of application of the same against the end of the pipe *f*.

What I claim and desire to secure by Letters Patent of the United States is:

A coupling comprising a tubular member provided at one end with an external annular shoulder, said shoulder having substantially radial seats therein which are open at their inner and outer ends and communicate with the interior of the coupling, a ball in each of the seats, the outer end of each socket being open for the introduction and removal of the ball and the inner end of the seats being restricted to permit of the ball extending a limited distance into the interior of the coupling, said coupling being provided with an internal shoulder inward of the seats, a slidable sleeve embracing the tubular member and normally closing the outer ends of the seats, said sleeve having an internal shoulder for engagement with the inner end of the annular shoulder on the coupling member to limit movement of the sleeve in one direction, and a ring sprung into an external groove on the coupling member in position to limit movement of the sleeve in the opposite direction.

In testimony whereof CAMILLE SENG has affixed his signature.

CAMILLE SENG.

459

July 26, 1927. 1,637,326

H. J. MURPHY

PRESSURE LUBRICATING SYSTEM AND APPARATUS

Filed Feb. 1, 1923 2 Sheets-Sheet 1

Fig. 1.

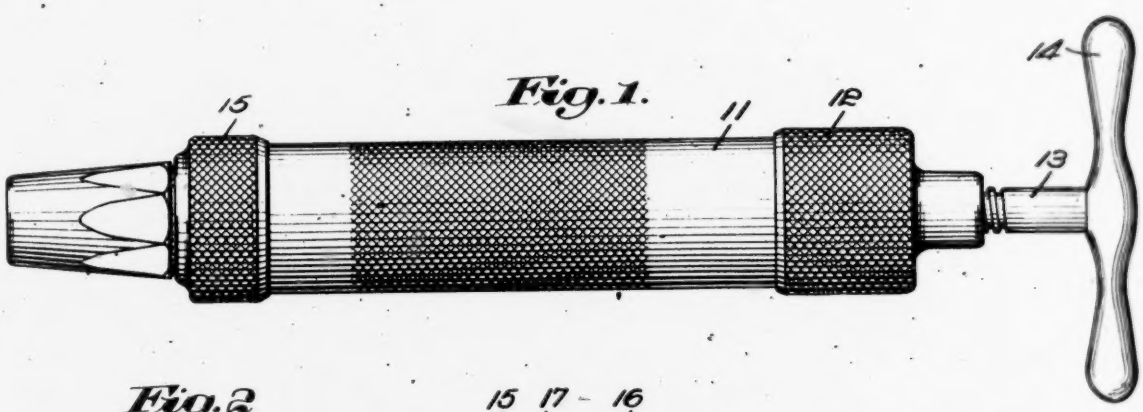

Fig. 2

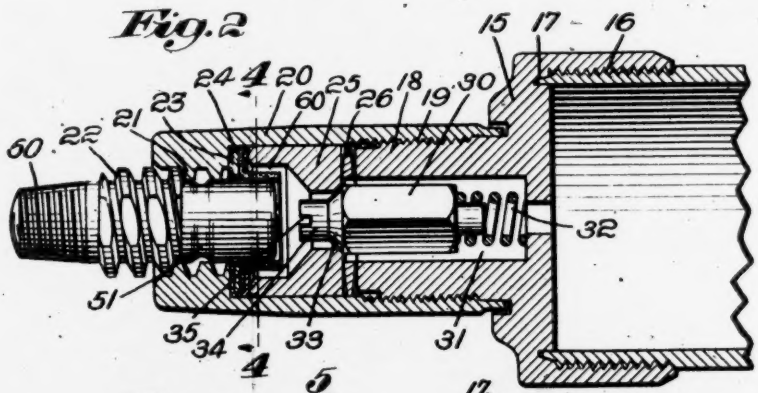

Fig. 4.

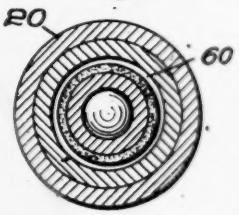

Fig. 3.

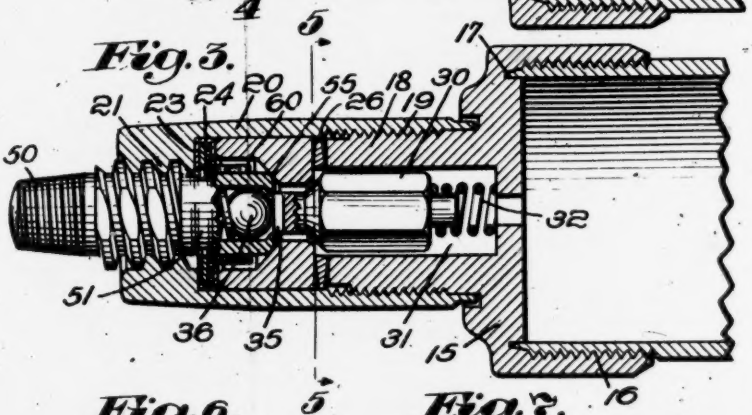

Fig. 5

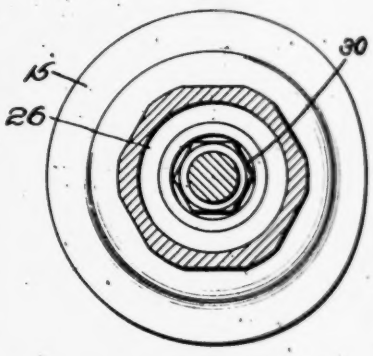

Fig. 6.

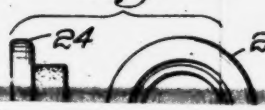

Fig. 7.

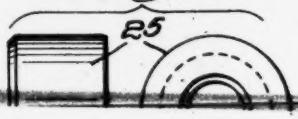

Fig. 8.

Fig. 1.

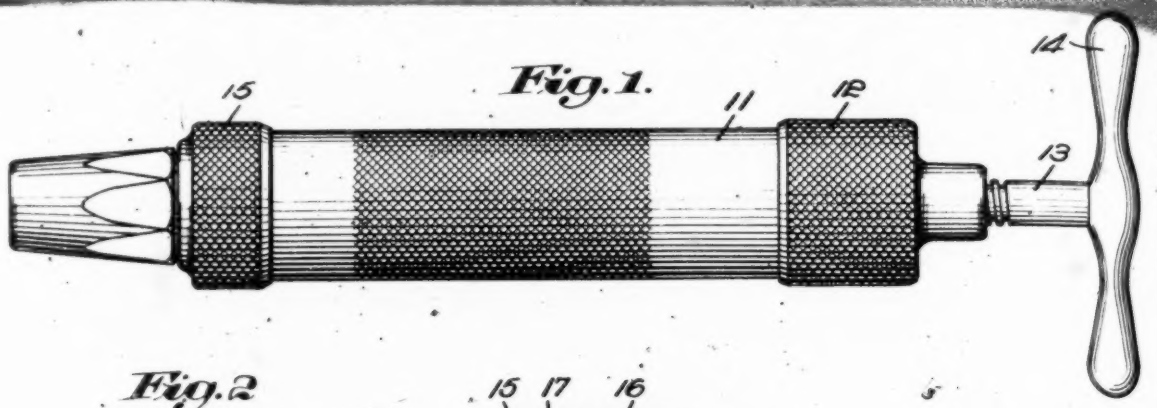

Fig. 2

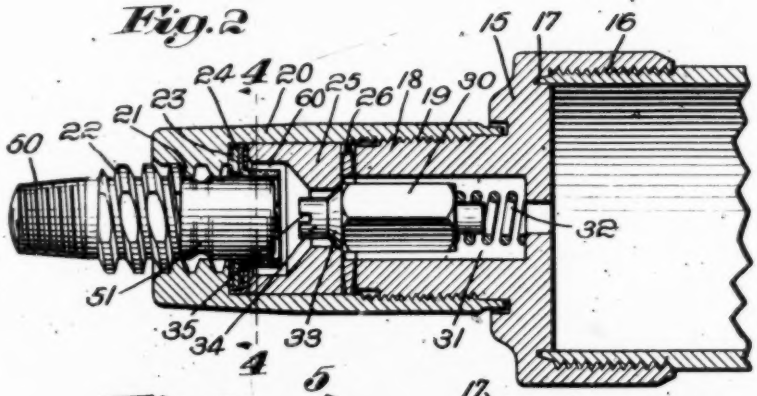

Fig. 4.

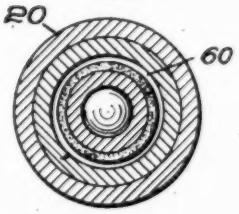

Fig. 5

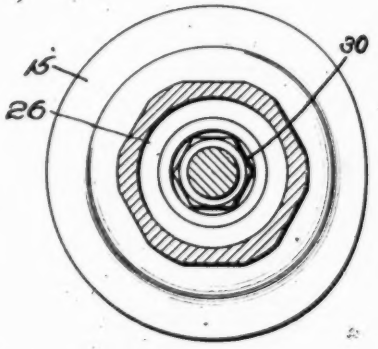

Fig. 3.

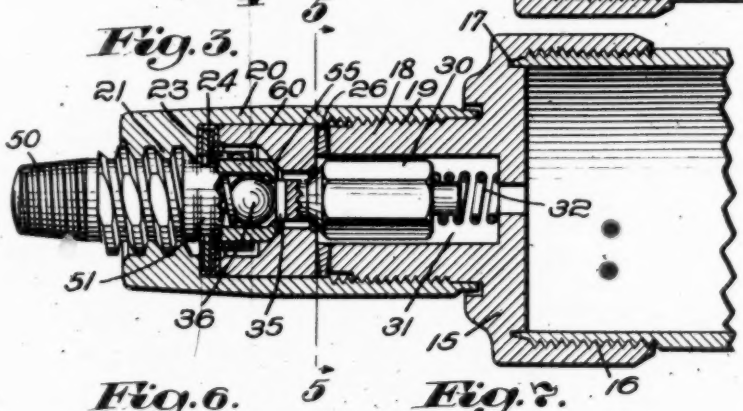

Fig. 6.

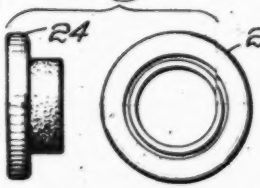

Fig. 7.

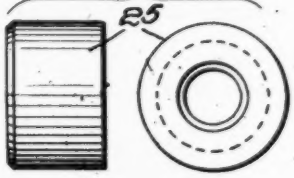

Fig. 8.

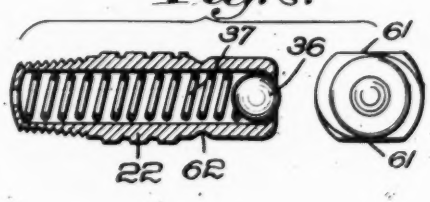

Fig. 9.

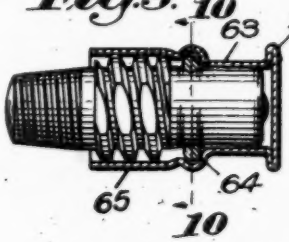

Fig. 10.

Inventor:
Howard J. Murphy.
by Emery, Booth, Jan[illegible] Varney.
Attys

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July 26, 1927. 1,637,326

H. J. MURPHY

PRESSURE LUBRICATING SYSTEM AND APPARATUS

Filed Feb. 1, 1923 2 Sheets-Sheet 2

Fig. 11.

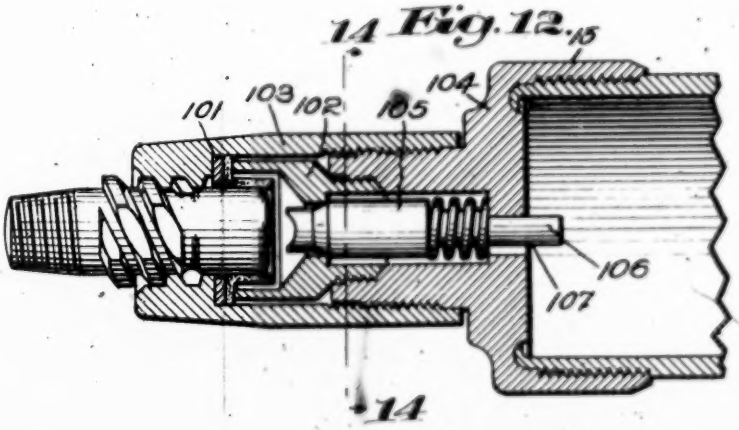


Fig. 12.

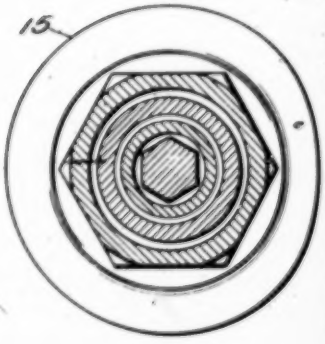


Fig. 14.

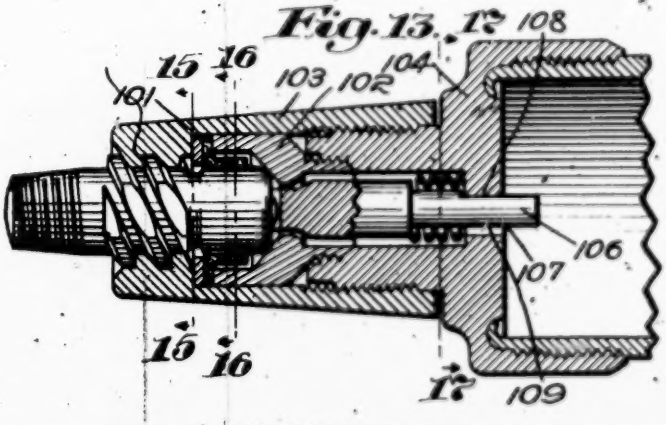


Fig. 13.

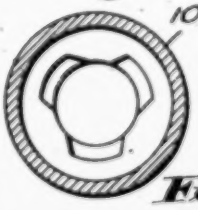


Fig. 15

Fig. 16.

Fig. 17.

Fig. 11.

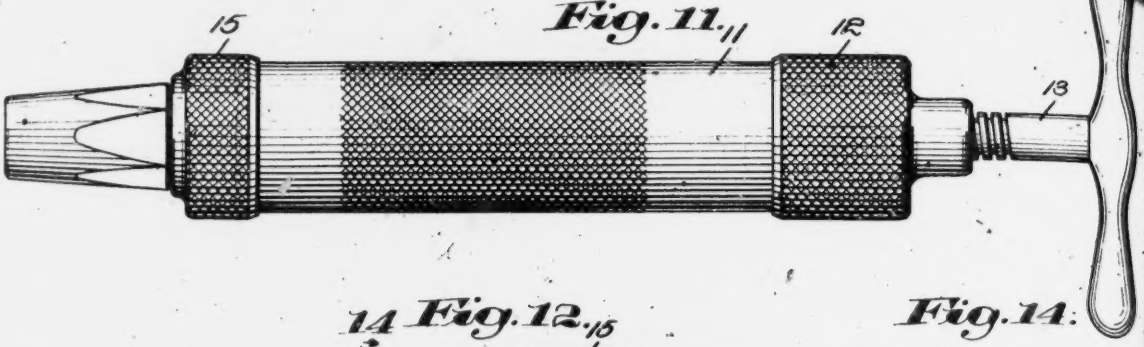


Fig. 12.

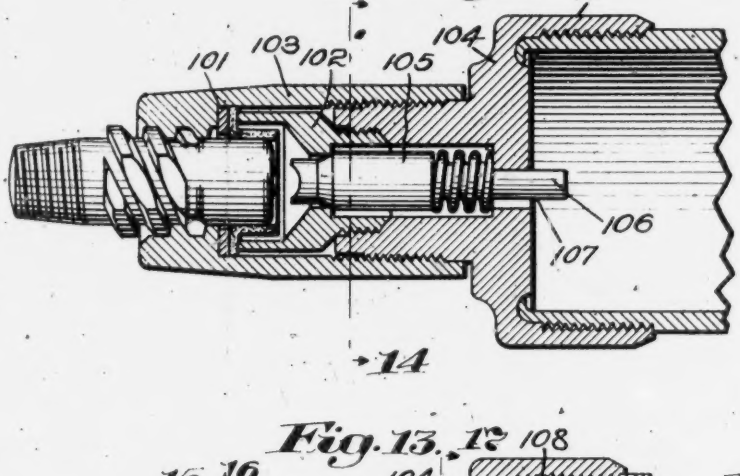


Fig. 14.

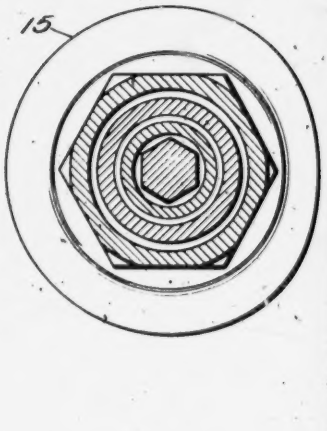


Fig. 13.

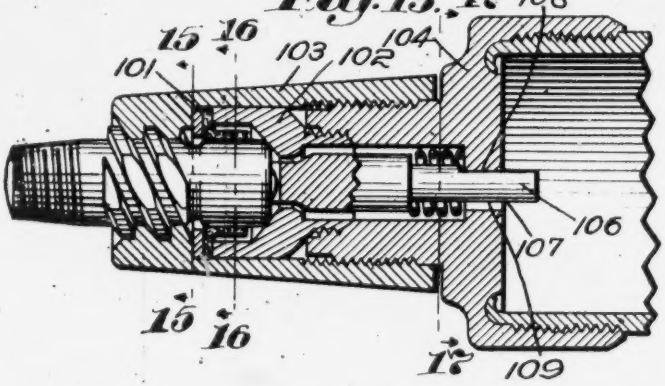


Fig. 15

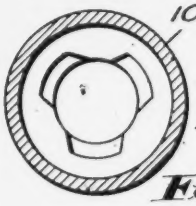


Fig. 16.

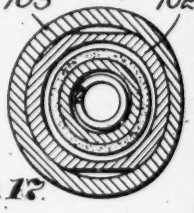


Fig. 17

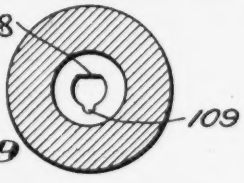


Fig. 18

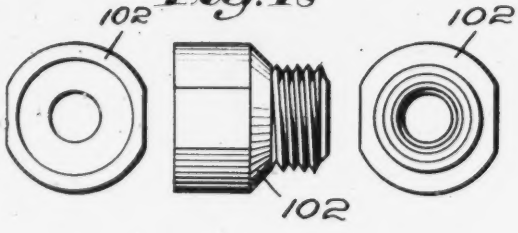
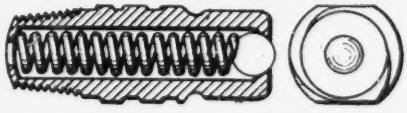


Fig. 19



Inventor:
Howard J. Murphy
by Emery, Booth, Janney & Varney
Attys

Patented July 26, 1927. 1,637,326

UNITED STATES PATENT OFFICE.

HOWARD J. MURPHY, OF READING, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE BASSICK MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF DELAWARE.

PRESSURE LUBRICATING SYSTEM AND APPARATUS.

Application filed February 1, 1923. Serial No. 616,302.

This invention pertains to improvements in pressure lubricating systems and apparatus of the type wherein a single lubricant expelling element is adapted successively to engage a plurality of lubricant-receiving nipples. It is among the objects of the invention to provide a pressure lubricating system simple in construction and efficient in operation.

In the drawings, which show preferred forms of my invention:

Figure 1 is a side elevation of a lubricant-expelling gun;

Fig. 2 is a central, longitudinal section through the nozzle of the gun shown in Fig. 1, with the lubricant-receiving nipple partially engaged in said nozzle, being partly in elevation;

Fig. 3 is a view similar to Fig. 2, but showing the lubricant-receiving element fully entered in the nozzle and with the valve in the nozzle opened to permit discharge of lubricant;

Fig. 4 is a section on the line 4—4 of Fig. 2;

Fig. 5 is a section on the line 5—5 of Fig. 3;

Fig. 6 includes side and end elevations of the preferred form of sealing washer to prevent leakage of lubricant between the nozzle and nipple, while lubricant is supplied to the latter under pressure;

Fig. 7 includes a side and end elevation of a part of the nozzle, providing a valve seat, an abutment for engagement by the head of the nipple and a part for holding the sealing washer in position;

Fig. 8 includes a longitudinal section through a preferred form of nipple and an end elevation thereof;

Fig. 9 is a side elevation of the nipple showing a section of the

nipple, and a valve and valve seat held in assembled relation independently of the nozzle sleeve;

Fig. 13 is a view similar to Fig. 12, but showing the lubricant-receiving nipple fully entered in the nozzle and with the valve in the nozzle opened to permit discharge of lubricant;

Fig. 14 is a section on the line 14—14 of Fig. 12;

Fig. 15 is a section on the line 15—15 of Fig. 13;

Fig. 16 is a section on the line 16—16 of Fig. 13;

Fig. 17 is a section on the line 17—17 of Fig. 13, the valve and spring omitted;

Fig. 18 includes a side and two end elevations of a part of the nozzle, providing a valve seat, an abutment for engagement by the head of the nipple, a part for holding the sealing washer in position, and adapted to hold the valve in assembled relation independently of the nozzle sleeve; and

Fig. 19 includes a section and an end elevation of a triple thread nipple.

In both forms of my invention illustrated, I have shown lubricant-receiving nipples presenting plural threads for engagement with cooperating threads on the nozzle of a lubricant expelling gun, the thread shown in the first embodiment of my invention being double. In the later embodiment, such thread is triple, to provide for coupling with less turning of the gun, to provide easier initial engagement of the threads and to provide, under high pressure in the gun, for the initiation of uncoupling movement and closure of the valve, by pressure of the lubricant in the barrel when torque is not applied, and this quite independently of any manual turning of the gun in uncoupling direction.

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Figure 1 is a side elevation of a lubricant-expelling gun;

Fig. 2 is a central, longitudinal section through the nozzle of the gun shown in Fig. 1, with the lubricant-receiving nipple partially engaged in said nozzle, being partly in elevation;

Fig. 3 is a view similar to Fig. 2, but showing the lubricant-receiving element fully entered in the nozzle and with the valve in the nozzle opened to permit discharge of lubricant;

Fig. 4 is a section on the line 4—4 of Fig. 2;

Fig. 5 is a section on the line 5—5 of Fig. 3;

Fig. 6 includes side and end elevations of the preferred form of sealing washer to prevent leakage of lubricant between the nozzle and nipple, while lubricant is supplied to the latter under pressure;

Fig. 7 includes a side and end elevation of a part of the nozzle, providing a valve seat, an abutment for engagement by the head of the nipple and a part for holding the sealing washer in position;

Fig. 8 includes a longitudinal section through a preferred form of nipple and an end elevation thereof;

Fig. 9 is a side elevation of the nipple showing a section of the preferred form of protecting cap therefor;

Fig. 10 is a section on the line 10—10 of Fig. 9, being partly in elevation;

Figs. 11 through 19 illustrate a later development of my invention wherein:

Fig. 11 is a side elevation of a lubricant-expelling gun;

Fig. 12 is a central, longitudinal section through the nozzle of the gun shown in Fig. 11, with the lubricant-receiving nipple partially engaged in said nozzle, being partly in elevation, showing a triple thread on the nipple, and a valve and valve seat held in assembled relation independently of the nozzle sleeve;

Fig. 13 is a view similar to Fig. 12, but showing the lubricant-receiving nipple fully entered in the nozzle and with the valve in the nozzle opened to permit discharge of lubricant;

Fig. 14 is a section on the line 14—14 of Fig. 12;

Fig. 15 is a section on the line 15—15 of Fig. 13;

Fig. 16 is a section on the line 16—16 of Fig. 13;

Fig. 17 is a section on the line 17—17 of Fig. 13, the valve and spring omitted;

Fig. 18 includes a side and two end elevations of a part of the nozzle, providing a valve seat, an abutment for engagement by the head of the nipple, a part for holding the sealing washer in position, and adapted to hold the valve in assembled relation independently of the nozzle sleeve; and

Fig. 19 includes a section and an end elevation of a triple thread nipple.

In both forms of my invention illustrated, I have shown lubricant-receiving nipples presenting plural threads for engagement with cooperating threads on the nozzle of a lubricant expelling gun, the thread shown in the first embodiment of my invention being double. In the later embodiment, such thread is triple, to provide for coupling with less turning of the gun, to provide easier initial engagement of the threads and to provide, under high pressure in the gun; for the initiation of uncoupling movement and closure of the valve, by pressure of the lubricant in the barrel when torque is not applied, and this quite independently of any manual turning of the gun in uncoupling direction.

In both embodiments of my invention, I have provided the nipple at the lubricant-securing end with a generally cylindrical projection sufficient to support the gun, when the threads of the nozzle are passed over the projection, and to prevent possible mutilation of the threads of either the nipple or nozzle. The nipple structure is not claimed herein but forms the subject matter of my divisional application Serial No. 8,586, filed February 11, 1925.

Cooperating with each embodiment of my invention, I have shown above the nipple-

engaging threads in the nozzle, an aligning portion for engagement with the end of the cylindrical portion on the nipple prior to engagement of the cooperating male and female threads, thereby to oppose cross-threading or other injurious engagement of such threads. I prefer, as shown, that this aligning portion be a washer immediately above the female threads in the end of the nozzle and immediately below a sealing part of the "hat washer" type, such sealing part adapted to surround the cylindrical portion of the cooperating nipple and to be pressed thereagainst by the pressure of the lubricant. In both embodiments of my invention illustrated, this "hat washer" is held in position by being pressed against an overlying annular end by pressure produced by screwing on the nozzle sleeve which carries or provides the female threaded portion of the coupling.

While for some purposes the valve need not be removable except from the interior of the head of the gun, I prefer that it be removable independently of the head of the gun and to this end I have shown in both embodiments of my invention illustrated a valve seat which holds the valve assembled and which is removable from the front of the head of the gun. This valve seat may provide the annular end holding the "hat washer" in position, and also may conveniently provide an abutment to limit the entrance of the nipple within the nozzle, which may in some degree act as a seal against the end of the nipple, though I prefer to avoid the use of any yielding gasket at this point and rely primarily on the "hat washer" to prevent leakage.

I will now describe in detail the form of my invention shown in Figures 1 through 10 of the drawings.

Referring to Fig. 1 through 10 of the drawings, and to the first form of my invention selected for illustrative purposes, I have shown a lubricant expelling gun including a barrel 11, rear head 12, into which is threaded a plunger stem 13 carrying the usual plunger interiorly of the barrel 11, and a handle 14. At the discharge end of the gun, I have shown a front head 15 secured to threads 16 to the exterior of the Between the projection 18 of the front head 15 and the threaded portion of nozzle sleeve 20, I have shown a shoulder 23 on the nozzle sleeve which engages and holds in position an aligning part, hereinafter more fully described, a sealing washer 24, a valve seat portion 25 and a sealing disc 26. The front head 15 is cored to receive a valve 30 having a polygonal portion whose corners engage the rounded inner wall of the valve guide chamber 31, the valve being pressed forwardly toward its seat by a valve spring 32 bearing at one end against the front head and at the other against the valve. The seating portion 33 of the valve is shown in Fig. 2 as bearing against the valve seat on the part 25, while in Fig. 3 these parts are separated to permit passage of lubricant. The valve opening end 34 may be slotted at 35 to permit passage of the lubricant to the lubricant-receiving opening in the end of the lubricant-receiving nipple. Such lubricant-receiving opening is preferably ordinarily closed by a ball check 36, which may be opened by the pressure of the lubricant, being normally pressed toward its seat by a nipple spring 37.

Assuming the parts carried by the front head 15 to be disassembled, the method of assembling the first embodiment of my invention illustrated is as follows. The valve part 30 with the valve spring 32 assembled therewith is dropped into the valve guide chamber 31. The aligning part, the sealing washer 24, the valve seat part 25 and sealing disc 26 may then be dropped in the order named within the nozzle sleeve 20, and the nozzle sleeve 20 screwed onto the projecting end 18 of the front head. When the screwing together of these parts is completed, the assembling operation is completed. Assuming the barrel 11 to be filled with lubricant, and assuming the lubricant-receiving nipple to be secured to its carrying part on the apparatus to be lubricated as by screwing the threaded end 50 thereof into a correspondingly threaded aperture, the lubricant expelling gun may be grasped by the handle 14 and the nozzle thereof introduced over the smooth end 51 of the lubricant-receiving nipple, which, contacting with the inner surface of the female threads in the nozzle, will

aligning portion be a washer immediately above the female threads in the end of the nozzle and immediately below a sealing part of the "hat washer" type, such sealing part adapted to surround the cylindrical portion of the cooperating nipple and to be pressed thereagainst by the pressure of the lubricant. In both embodiments of my invention illustrated, this "hat washer" is held in position by being pressed against an overlying annular end by pressure produced by screwing on the nozzle sleeve which carries or provides the female threaded portion of the coupling.

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I will now describe in detail the form of my invention shown in Figures 1 through 10 of the drawings.

Referring to Fig. 1 through 10 of the drawings, and to the first form of my invention selected for illustrative purposes, I have shown a lubricant expelling gun including a barrel 11, rear head 12, into which is threaded a plunger stem 13 carrying the usual plunger interiorly of the barrel 11, and a handle 14. At the discharge end of the gun, I have shown a front head 15 secured to threads 16 to the exterior of the barrel 11 and presenting a recess 17 into which is introduced a sharpened end edge of the barrel 11 to provide a tight seal between the head 15 and the barrel 11. The preferred form of front head herein illustrated includes a forwardly projecting portion 18 exteriorly threaded at 19 to engage with internal threads on a nozzle sleeve 20. The nozzle sleeve 20 carries, preferably integral therewith, female threads 21, preferably of steep pitch and herein shown as double, to engage corresponding male threads 22 on the lubricant-receiving nipple.

having a polygonal portion whose corners engage the rounded inner wall of the valve guide chamber 31, the valve being pressed forwardly toward its seat by a valve spring 32 bearing at one end against the front head and at the other against the valve. The seating portion 33 of the valve is shown in Fig. 2 as bearing against the valve seat on the part 25, while in Fig. 3 these parts are separated to permit passage of lubricant. The valve opening end 34 may be slotted at 35 to permit passage of the lubricant to the lubricant-receiving opening in the end of the lubricant-receiving nipple. Such lubricant-receiving opening is preferably ordinarily closed by a ball check 36, which may be opened by the pressure of the lubricant, being normally pressed toward its seat by a nipple spring 37.

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respects but in other respects hereinafter referred to. Where the barrel of the gun rigidly carries the nozzle, the end 51 of the nipple and the threads of the nozzle are sufficient to carry the weight of the gun, though full of lubricant, and where sufficient entrance of the nipple is effected to provide entrance of the head thereof within the aligning part, sufficient bearing is provided not only to hold this weight but to provide substantial alignment even though the tendency to bind is increased by transverse pressure of the operator's hand on the end of the barrel or handle, in a position providing of course a leverage very unfavorable to alignment of the parts.

If now, the handle 14 be turned in clockwise direction, the whole lubricant expelling gun will be turned in clockwise direction so that the female threads 21 on the nozzle will engage the male threads 22 on the nipple and draw the nozzle over the nipple, forcing the smooth portion 51 of the nipple through the flexible sealing washer 24, the latter being of the type generally known as a "hat washer". When this screwing together operation has been carried to a sufficient point, the projection 34 on the valve in the nozzle will abut against the lubricant-receiving end of the nipple and the valve will be opened, as shown in Fig. 3, until the end of the nipple abuts against the stop shoulder 55. The valve now being opened, further clockwise movement of the handle of the gun will force lubricant past the valve, thereby opening the ball check 36 and permitting passage of lubricant to the part to be lubricated.

The lubricant expelled may, if desired, be under great pressure, but no substantial leakage between the nipple 51 and the nozzle is possible because pressure on the exterior of the hat washer holds the latter in such close contact to the smooth cylindrical portion of the nipple as to preclude leakage. No leakage past the threads 19 takes place because the sealing washer 26, which is preferably of relatively soft metal such as brass, precludes such leakage. In the first embodiment of my invention, all parts of the nozzle except the sealing washer 26 are preferably of steel and the nozzle sleeve 20 and valve seat part 25 are preferably case hardened.

not only to admit pressure behind the leather to insure a tight seal, but also, where a relatively light lubricant such as oil is used as distinguished from grease, to catch surplus oil passing through the valve during the instant when valve-closing operation is taking place.

That portion of the nipple presenting the steep pitch threads 22 is preferably provided with flattened portions 61, 61 to admit of the application of a suitable wrench to screw the nipple into its carrying part. The nipple is also preferably provided with a neck 62 for engagement by suitable means associated with a dust-excluding cap 63, which may be formed of a single sheet of metal, as shown in Fig. 9, enclosing a resilient ring-like spring 64 for engagement in said neck 62 when the cap is fully applied to the nipple. The skirt portion 65 protects the threads of the nipple from dust and mud, while an enlarged head 66 provides a finger hold permitting easy removal.

In the later embodiment of my invention shown in Figs. 11 through 19, the operation of the parts is generally the same as in the first embodiment thereof. There are, however, substantial advantages. The triple thread provides easier engagement than the double thread, and the steeper pitch reduces the turning necessary to effect coupling and opening of the valve, while also providing (at higher pressures) automatic initiation of uncoupling movement (when torque is removed) to the point where the valve has closed, this arising from the pressure of the lubricant on the valve pressing the nozzle away from the nipple with sufficient force to overcome the friction on the threads between the nozzle and nipple. The aligning or centering portion 101 is the same as in the earlier figures, and provides a seat for a similar "hat washer". The valve seat 102 and parts associated therewith are held in position independently of the nozzle sleeve 103, being screwed to the front head 104, which it is obvious may if desired be integral with the barrel of the gun. Thus the hat leather may, if desired, be replaced without disturbing the valve parts. The valve 105 differs from the one earlier described in that means are provided to preclude turning thereof

of the head thereof within the aligning part, sufficient bearing is provided not only to hold this weight but to provide substantial alignment even though the tendency to bind is increased by transverse pressure of the operator's hand on the end of the barrel or handle, in a position providing of course a leverage very unfavorable to alignment of the parts.

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When the lubricant expelling gun is to be removed from the nipple, turning of the handle 14 in counterclockwise direction will withdraw the nozzle from over the nipple, gradually permitting closure of the valve. The valve reaches its seat before the hat washer 24 is clear of the cylindrical portion 51 of the nipple and all pressure on the nipple is relieved by enlargement of the chamber between the head of the nipple and valve before there is any opportunity afforded for leakage. I preferably provide a relatively large aperture 60 behind the hat leather 24,

That portion of the nipple presenting the steep pitch threads 22 is preferably provided with flattened portions 61, 61 to admit of the application of a suitable wrench to screw the nipple into its carrying part. The nipple is also preferably provided with a neck 62 for engagement by suitable means associated with a dust-excluding cap 63, which may be formed of a single sheet of metal, as shown in Fig. 9, enclosing a resilient ring-like spring 64 for engagement in said neck 62 when the cap is fully applied to the nipple. The skirt portion 65 protects the threads of the nipple from dust and mud, while an enlarged head 66 provides a finger hold permitting easy removal.

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seat 102 is not subsequently turned, and there is normally no occasion for subsequently turning this.

While I have shown and described specific embodiments of my invention, it will be understood that considerable changes may be made without departing from the scope thereof, which is best defined in the following claims.

I claim:

1. In lubricating apparatus of the class described, a lubricant-expelling device for cooperation with a lubricant-receiving nipple, said device including a barrel having a front head and a coupling nozzle rigidly connected to said head, said nozzle comprising a female threaded portion for quick detachable connection with said nipple, sealing means for effecting a lubricant-tight connection with said nipple, a valve, and a seat for said valve all located forwardly of and detachably secured to said front head independently of said female threaded portion.

2. A lubricant-expelling device for cooperation with a lubricant-receiving nipple, said device including a barrel, a nozzle nonrotatably secured thereto, said nozzle presenting a nozzle sleeve interiorly threaded at one end for engagement with the nipple, and containing a hat washer, a fixed stop element to limit entrance of the nipple in the nozzle, said stop element having one end thereof seated against the base of said hat washer to hold it in place and presenting at the other end a valve seat.

3. A lubricating device presenting a nozzle having a sleeve and female threads integral with said sleeve for engagement with male threads on a lubricant-receiving part, a removable centering part beyond said female threads for guiding said nozzle relative to the nipple and a removable valve seat part seated against said centering part and presenting an angled shoulder for engagement with the end of the nipple.

4. A lubricating device presenting a nozzle having a sleeve, female threads adjacent the end of said sleeve and a shoulder above said female threads, said shoulder supporting a removable centering part.

5. A lubricating device presenting a nozzle having a sleeve, female threads adja-

part, and a sealing washer held in position by said valve seat presenting part.

7. Lubricating apparatus including a nozzle sleeve, a nozzle sleeve carrying part, a valve seat presenting part between said sleeve and sleeve carrying part and a removable centering part held in position in said sleeve by said valve seat-presenting part.

8. Lubricating apparatus including a nozzle sleeve, a nozzle sleeve carrying part, a valve seat presenting part between said sleeve and sleeve carrying part, a removable centering part and a hat washer both held in position by said sleeve against said valve seat presenting part.

9. Lubricating apparatus including a barrel having a closure at its discharge end, a nozzle secured to said closure and presenting threads interiorly of its end for engagement with an exteriorly threaded lubricant-receiving element, a chamber in said nozzle above said threads and a centering washer secured in said chamber adjacent the inner ends of said threads to engage an extension on the nipple and preclude excessive angularity between the nipple and nozzle during initial coming together of the cooperating threads.

10. A lubricating device presenting a threaded coupling for engagement with a threaded lubricant-receiving nipple, said coupling presenting a nipple centering portion above the threads in the coupling, the threads being of steep pitch and plural for quick connection between the device and the nipple.

11. In apparatus of the class described, a lubricating device presenting a coupling having a threaded part for engagement with a threaded lubricant-receiving nipple, said threads being rugged and of steep pitch for quick connection between the device and the nipple, sealing means adjacent the threaded part for effecting a lubricant-tight connection with said nipple, and means between said sealing means and said threaded part for centering a nipple relatively to said threaded coupling and for preventing said sealing means from projecting into the threaded part of the coupling.

12. Lubricating apparatus presenting a sleeve having integral means for making a quick detachable connection with a lubricant-

1. In lubricating apparatus of the class described, a lubricant-expelling device for cooperation with a lubricant-receiving nipple, said device including a barrel having a front head and a coupling nozzle rigidly connected to said head, said nozzle comprising a female threaded portion for quick detachable connection with said nipple, sealing means for effecting a lubricant-tight connection with said nipple, a valve, and a seat for said valve all located forwardly of and detachably secured to said front head independently of said female threaded portion.

2. A lubricant-expelling device for cooperation with a lubricant-receiving nipple, said device including a barrel, a nozzle nonrotatably secured thereto, said nozzle presenting a nozzle sleeve interiorly threaded at one end for engagement with the nipple, and containing a hat washer, a fixed stop element to limit entrance of the nipple in the nozzle, said stop element having one end thereof seated against the base of said hat washer to hold it in place and presenting at the other end a valve seat.

3. A lubricating device presenting a nozzle having a sleeve and female threads integral with said sleeve for engagement with male threads on a lubricant-receiving part, a removable centering part beyond said female threads for guiding said nozzle relative to the nipple and a removable valve seat part seated against said centering part and presenting an angled shoulder for engagement with the end of the nipple.

4. A lubricating device presenting a nozzle having a sleeve, female threads adjacent the end of said sleeve and a shoulder above said female threads, said shoulder supporting a removable centering part.

5. A lubricating device presenting a nozzle having a sleeve, female threads adjacent the ends of said sleeve and a shoulder above said female threads, said shoulder supporting a removable centering part and beyond said part a hat washer back-supported by said centering part to prevent lubricant from forcing said washer into said female threads.

6. Lubricating apparatus including a nozzle sleeve having interlocking means for making a quick detachable connection with a lubricant receiving fitting, a nozzle sleeve carrying part, and a valve seat presenting part between said sleeve and sleeve carrying part.

7. Lubricating apparatus including a nozzle sleeve, a nozzle sleeve carrying part, a valve seat presenting part between said sleeve and sleeve carrying part, a removable centering part and a hat washer both held in position by said sleeve against said valve seat presenting part.

9. Lubricating apparatus including a barrel having a closure at its discharge end, a nozzle secured to said closure and presenting threads interiorly of its end for engagement with an exteriorly threaded lubricant-receiving element, a chamber in said nozzle above said threads and a centering washer secured in said chamber adjacent the inner ends of said threads to engage an extension on the nipple and preclude excessive angularity between the nipple and nozzle during initial coming together of the cooperating threads.

10. A lubricating device presenting a threaded coupling for engagement with a threaded lubricant-receiving nipple, said coupling presenting a nipple centering portion above the threads in the coupling, the threads being of steep pitch and plural for quick connection between the device and the nipple.

11. In apparatus of the class described, a lubricating device presenting a coupling having a threaded part for engagement with a threaded lubricant-receiving nipple, said threads being rugged and of steep pitch for quick connection between the device and the nipple, sealing means adjacent the threaded part for effecting a lubricant-tight connection with said nipple, and means between said sealing means and said threaded part for centering a nipple relatively to said threaded coupling and for preventing said sealing means from projecting into the threaded part of the coupling.

12. Lubricating apparatus presenting a sleeve having integral means for making a quick detachable connection with a lubricant receiving fitting, a support therefor, a valve guided in said support, and a valve seat, said valve seat threadedly connected to the front of said support and holding said valve in assembled relation even after removal of said sleeve.

13. Lubricating apparatus including a threaded nipple and a cooperating coupling presenting a cooperating threaded part for engagement with the threads on said nipple, said nipple having at its lubricant-receiving end an extension of substantial length and

of a diameter substantially that of the bottom of its threads, and a centering part in said nozzle beyond said threads, said centering part supporting the base flange of a hat washer adapted to surround and closely bear against said extension.

14. Lubricating apparatus including a lubricant-expelling device comprising a barrel, a lubricant-expelling plunger in said barrel, a nozzle rigidly connected to said barrel, said nozzle presenting coupling means cooperating with coupling means presented by a lubricant-receiving nipple to secure the device to the nipple, a removable centering part and a hat washer beyond said coupling means in said nozzle for periphreal engagement with the end of the nipple, and a fixed abutment a substantial distance beyond said coupling means in said nozzle for engagement with the end of the nipple beyond said hat washer.

15. Lubricating apparatus including a nozzle having a sleeve presenting a plurality of female threads at one end thereof, a hat washer beyond said threads, and a valve within said sleeve beyond said hat washer, said valve including a valve seat part separate from said sleeve to permit removal of said washer from the back end of said sleeve.

16. Lubricating apparatus including a nozzle having a sleeve presenting a plurality of female threads at one end thereof, a hat washer beyond said threads, a valve within said sleeve beyond said hat washer, said valve including a valve seat part separate from said sleeve to permit removal of said washer from the back end of said sleeve, and a relatively thin metal washer between said threads and said hat washer to prevent lubricant from forcing the hat washer into said female threads.

17. A lubricant-expelling device including a supply barrel presenting a valve seat part secured thereto to hold a valve in assembled relation, a sleeve secured to said barrel and presenting a female thread adjacent the outer end thereof, a hat washer having its base held between a metal centering washer and the end of said valve seat part, and said centering washer back-supporting said hat washer adjacent the inner end of said female threads for engagement with corresponding male threads on a lubricant-receiving nipple, said sleeve presenting a chamber between said female threads and said head, and in said chamber a valve seat-providing part, and a hat washer having its base flange pressed toward said valve seat part by said sleeve and having its tubular portion extending within said valve seat part.

20. A lubricant-expelling device having a head at its discharge end, said head carrying a sleeve presenting at its outer end female threads for engagement with corresponding male threads on a lubricant-receiving nipple, said sleeve presenting a chamber between said female threads and said head, and in said chamber a shoulder behind said female threads, a hat washer, valve seat-providing means interiorly chambered to receive the tubular portion of said hat washer, and presenting a tubular shell projecting toward said shoulder to press the base of said hat washer toward said shoulder when said sleeve is assembled with said head.

21. A lubricant-expelling device having a head at its discharge end, said head carrying a sleeve presenting at its outer end female threads for engagement with corresponding male threads on a lubricant-receiving nipple, said sleeve presenting a chamber between said female threads and said head, and in said chamber a shoulder behind said female threads, an apertured disc supported by said shoulder, a hat washer having a base flange supported by said disc, and a tubular part adapted to press said base flange against said disc when said sleeve is assembled with said head, said hat washer having a tubular portion extending within said tubular part.

22. Lubricating apparatus presenting a nozzle including a sleeve having interlocking means for making a quick detachable connection with a lubricant receiving fitting removably secured to the front head of a lubricant expelling device, a valve guided within said head, a seat for said valve independent of said nozzle sleeve, said nozzle sleeve being removably secured to said front head and adapted to clamp said seat thereto, said valve and said seat being removable from the front of said head subsequent to the removal of said sleeve therefrom.

18. A lubricant-[illegible]

a lubricant-expelling plunger in said barrel, a nozzle rigidly connected to said barrel, said nozzle presenting coupling means cooperating with coupling means presented by a lubricant-receiving nipple to secure the device to the nipple, a removable centering part and a hat washer beyond said coupling means in said nozzle for periphreal engagement with the end of the nipple, and a fixed abutment a substantial distance beyond said coupling means in said nozzle for engagement with the end of the nipple beyond said hat washer.

15. Lubricating apparatus including a nozzle having a sleeve presenting a plurality of female threads at one end thereof, a hat washer beyond said threads, and a valve within said sleeve beyond said hat washer, said valve including a valve seat part separate from said sleeve to permit removal of said washer from the back end of said sleeve.

16. Lubricating apparatus including a nozzle having a sleeve presenting a plurality of female threads at one end thereof, a hat washer beyond said threads, a valve within said sleeve beyond said hat washer, said valve including a valve seat part separate from said sleeve to permit removal of said washer from the back end of said sleeve, and a relatively thin metal washer between said threads and said hat washer to prevent lubricant from forcing the hat washer into said female threads.

17. A lubricant-expelling device including a supply barrel presenting a valve seat part secured thereto to hold a valve in assembled relation, a sleeve secured to said barrel and presenting a female thread adjacent the outer end thereof, a hat washer having its base held between a metal centering washer and the end of said valve seat part, and said centering washer back-supporting said hat washer adjacent the inner end of said female thread.

18. A lubricant-expelling device having a head at its discharge end, said head carrying a sleeve presenting at its outer end female threads for engagement with corresponding male threads on a lubricant-receiving nipple, said sleeve presenting a chamber between said female threads and said head, and in said chamber a valve seat-providing part removable when said sleeve is disconnected from said head.

19. A lubricant-expelling device having a head at its discharge end, said head carrying a sleeve presenting at its outer end female ing within said valve seat part.

20. A lubricant-expelling device having a head at its discharge end, said head carrying a sleeve presenting at its outer end female threads for engagement with corresponding male threads on a lubricant-receiving nipple, said sleeve presenting a chamber between said female threads and said head, and in said chamber a shoulder behind said female threads, a hat washer, valve seat-providing means interiorly chambered to receive the tubular portion of said hat washer, and presenting a tubular shell projecting toward said shoulder to press the base of said hat washer toward said shoulder when said sleeve is assembled with said head.

21. A lubricant-expelling device having a head at its discharge end, said head carrying a sleeve presenting at its outer end female threads for engagement with corresponding male threads on a lubricant-receiving nipple, said sleeve presenting a chamber between said female threads and said head, and in said chamber a shoulder behind said female threads, an apertured disc supported by said shoulder, a hat washer having a base flange supported by said disc, and a tubular part adapted to press said base flange against said disc when said sleeve is assembled with said head, said hat washer having a tubular portion extending within said tubular part.

22. Lubricating apparatus presenting a nozzle including a sleeve having interlocking means for making a quick detachable connection with a lubricant receiving fitting removably secured to the front head of a lubricant expelling device, a valve guided within said head, a seat for said valve independent of said nozzle sleeve, said nozzle sleeve being removably secured to said front head and adapted to clamp said seat thereto, said valve and said seat being removable from the front of said head subsequent to the removal of said sleeve therefrom.

23. In a lubricating apparatus of the class described, the combination of a lubricant compressor, a nozzle connected thereto, said nozzle having a bore formed near its outer end with an annular inwardly facing shoulder and with quick detachable means for engaging a nipple, said bore having therein a sleeve provided with an annular forwardly facing shoulder, a sealing member for engagement with the side walls of said nipple and formed with a peripheral portion operatively held between said shoulders, said sleeve provided with a second forwardly

facing annular shoulder for limiting the inward extent of projection of said nipple into said bore.

24. In a lubricating apparatus of the class described, the combination of a lubricant compressor, a nozzle connected thereto, said nozzle provided with a lubricant conducting bore having near its extremity means for making a quick-detachable connection with a lubricant receiving nipple and formed at an intermediate portion thereof with an annular tapered shoulder forming a stop limiting the inward extent of projection of said nipple into said bore, and sealing means for engaging the side walls of said nipple situated between said quick-detachable means and said annular shoulder.

In testimony whereof, I have signed my name to this specification.

HOWARD J. MURPHY.

A.D. 1915. Feb. 24. No. 3028.
SENG'S COMPLETE SPECIFICATION. 1 SHEET

2nd Edition

[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 1

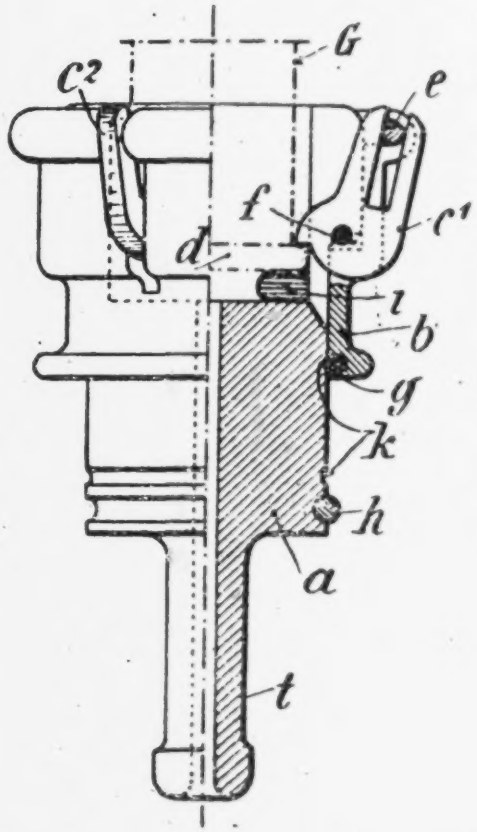


Fig. 2.

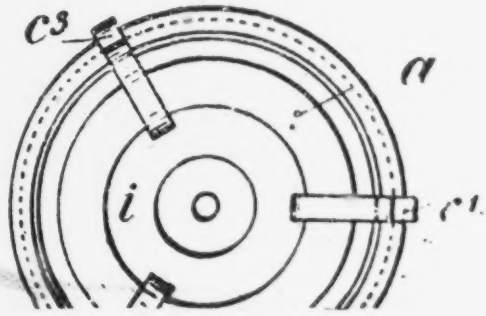


Fig. 3

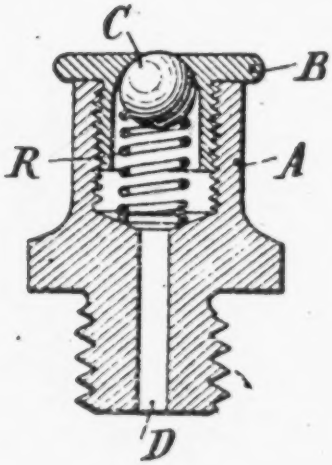
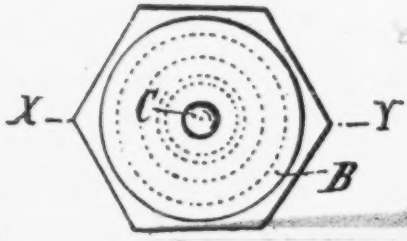


Fig. 4.



[This Drawing is a reproduction of the Original on a reduced scale]

Fig. 1

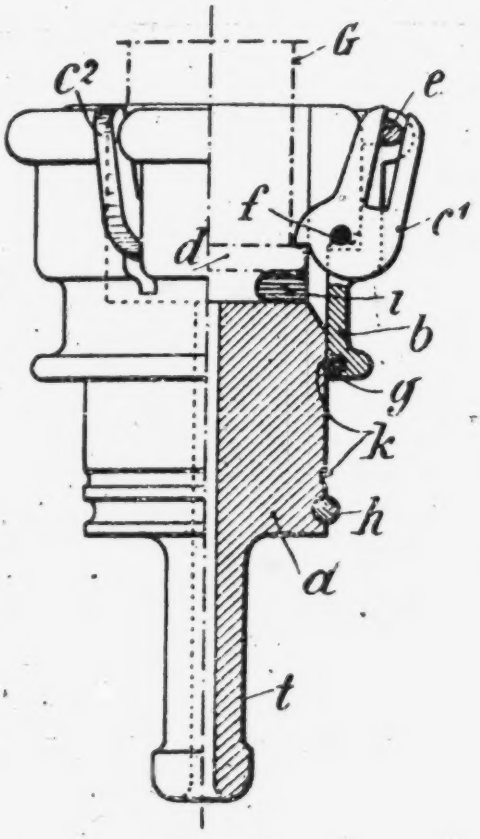


Fig. 3

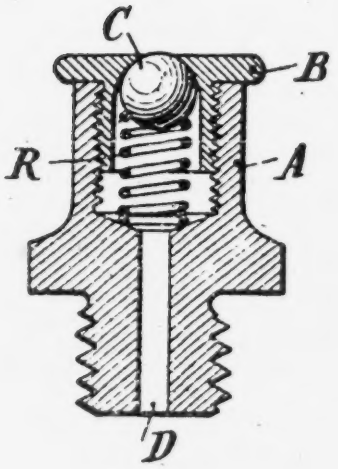


Fig. 2.

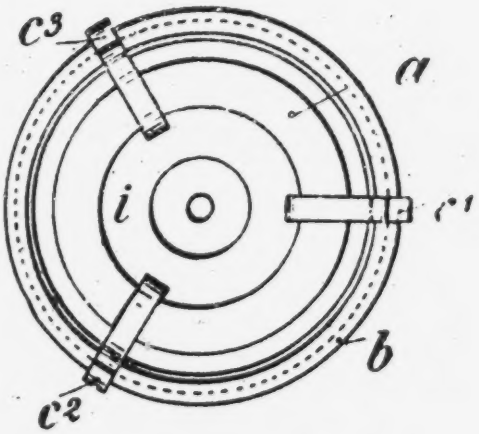
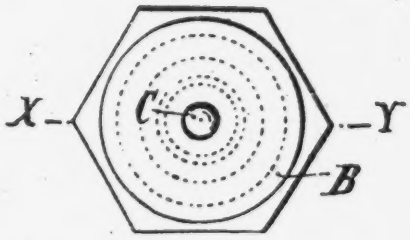


Fig. 4.



[Second Edition.]

N° 3028 A. D. 1915

(*Under International Convention.*)

Date claimed for Patent under Patents and Designs Act, 1907, being date of first Foreign Application (in France), } *24th Feb., 1914*

Date of Application (in the United Kingdom), 24th Feb., 1915

At the expiration of twelve months from the date of the first Foreign Application the provision of Section 91 (3) (a) of the Patents and Designs Act, 1907, as to inspection of Specification, became operative

Accepted, 1st June, 1916

COMPLETE SPECIFICATION.

Instantaneous Joint for Pipes Conveying Fluids under Pressure particularly applicable to Lubricators.

I, Camille Seng, of rue Carnot, Romilly-sur-Seine, in the Republic of France, Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The present invention relates to an instantaneous coupling device for fluids under pressure, in which the joining of a pipe union with an appropriate pipe end furnished with a flange is effected by the combination, with a sliding ring, of jointed bent levers each presenting arms of different lengths and on the longer of which the ring acts for the purpose of engaging the shorter with the flange of the pipe to be coupled. In this way an energetic gripping action of the joint is produced, from the fact of the difference between the lever arms, and a wedging action on the ring preventing it from displacing itself backwards of its own accord, and that without it being necessary to have recourse to special arrangements for bolting the said ring at the engaged position of the levers, or to proceed to a screwing or rotary movement of one of the parts over the other. The joint may, more particularly, be constituted by a body comprising a chamber within which the other part of the joint may be introduced, which rests or bears on a resilient packing assuring fluid-tightness of the joint. The connection is effected by means of claws which project into the said chamber and are pivoted in slots formed in the joint; the said claws, being extended beyond their point of articulation by slotted arms which penetrate slots formed in the controlling ring or sleeve are operated by the latter by means of an open ring engaging the slots of the said arms.

This instantaneous joint is more particularly applied in the case where it is desired to have forced lubrication with oil, grease and so on. In this case the joint which is connected to the piping of the delivery mechanism of a pump or the like, may be secured as desired by the operation of the sleeve actuating the claws, upon tht connecting flangt with which the lubricator must be provided for that purpose. This flange may be formed upon the cap which closes the

lubricator and which comprises an opening constituting a seat for the obturator subjected to the action of an internal spring.

The accompanying drawings illustrate, by way of example, a constructional form of the invention.

Figure 1 shews partly in elevation and partly in vertical section, a constructional form of the instantaneous joint forming the subject matter of the invention.

Figure 2 is a corresponding section plan.

Figures 3 and 4 shew in vertical section taken on line X Y and in plan, respectively, a constructional form of ball lubricator which has been more particularly designed for use in conjunction with the instantaneous joint in the case of forced lubrication.

The instantaneous joint comprises two main parts, one the body *a* and the other the controlling sleeve *b* adapted to slide on the body *a*.

The body *a* which constitutes a kind of a cup for the reception of the member upon which the joint is to be secured, is formed in the edge defining the said cup, with a certain number of slots receiving the levers c^1 c^2 c^3 forming claws. These levers c^1 c^2 c^3 are pivotally connected to the body *a* by means of an open ring *f* located in a groove suitably disposed for that purpose. The levers also penetrate the corresponding slots formed in the sleeve *b* which is adapted to be displaced longitudinally with respect to the body *a*. Each lever is provided with a nose or tooth for connecting purposes, projecting into the cup of the body *a* and constitutes with its other arm, a controlling fork. These forks are connected with one another by an open ring *e* disposed in a groove formed in the displacable sleeve *b*. The latter is also formed with a groove in which another ring *g* is located which according to its displacements, may move in one direction or the other, engage in the grooves *k* formed in the body *a*, the latter being thus locked in the extreme positions which it may occupy. Another ring *h* serves as an abutment.

A rubber ring *i* is provided at the bottom of the cup and serves as a bearing for the member G to be connected, the claws c^1 c^2 c^3 acting in a manner to apply the same onto the said ring *i* which is compressed and forms a fluid-tight joint.

It will be observed that in the position shewnin Figure 1 the sleeve *b* being pushed back on the body *a* and towards the member G to be connected, the claws c^1 c^2 c^3 project within the body *a* and bearing on the flange *d* of the other part of the coupling G they push the latter onto the inner rubber ring *i*. It will be noted that any tractive effort exerted on the body *a* cannot, in any case, produce separation of the joint.

On the contrary, when the sleeve *b* is drawn downwards, the ring *e* belonging to the latter operates the levers c^1 c^2 c^3 and permits of the disengagement of the member G previously connected; the sleeve *b* being locked in this position by the engagement of the ring *g* in the corresponding groove *k*.

This instantaneous joint which may be used for ensuring the junction of the two conduits wherein any fluid circulates and in particular, wherein any fluid under pressure circulates, may be used particularly in the case of forced lubrication with oil or grease. To this end recourse may be had to a ball lubricator forming an obturator and comprising an external flange for securing and fixing the joint (Figures 1 and 2).

Referring to Figures 3 and 4, this lubricator is constituted by a hollow body A formed with a conduit D for the lubricant. A screw-threaded extension permits of placing the lubricator in place. In the chamber within the body A which is formed with a screw-thread, a plug B is screwed, provided with the flange on which the connecting claws c^1, c^2 c^3 (Figures 1, 2) are secured, so as to effect a joint with the pumps intended to deliver the lubricant. In the illustrated example, the plug B is, moreover, hollowed out internally so as to receive a ball C constantly pushed against its seat by an inner spring R thus ensuring closure of the lubricator.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. Instantaneous joint for pipes conveying fluids under pressure, particularly applicable to lubricators, characterised by the fact that the two parts of the coupling are united or separated from one another by the mere longitudinal displacement, on one of the parts, of an operating ring displacable against the longer arms of bent levers, pivoted on this part of the coupling, and the shorter arms of which also project or not into the interior of the latter, in order to bear upon the other part which is engaged therewith and to apply it with force against the fluid-tight washer ensuring the joint, or to release the said part. substantially as described.

2. A constructional form of the instantaneous joint set forth in Claim 1, characterized by the fact that in the slots of a hollowed body comprising within a fluid-tight jointing ring, pivotally connected levers or claws are provided, extended by fork-shaped arms, these levers being displaced in such a manner that their noses or teeth project or do not project into the hollow space within the said body in order to rest upon or disengage the flange belonging to the other part of the joint when a sliding sleeve is displaced upon the aforesaid body, the sleeve being formed with slots for the levers or claws and carrying an operating device engaging in the slotted arms of the latter.

3. Application of the joint set forth in Claims 1 and 2, more particularly in the case of forced lubrication, characterised by the fact that the joint which depends, for example, from the delivery piping of a pump, can be secured or separated, as desired, from the lubricator which comprises, to this end, a flange or other fixing means co-operating with the fixing claws or levers, the said flange belonging to a plug which closes the body of the lubricator and the opening of which forms a seat for an obturator such as a ball or valve subjected to the action of an inner spring.

Dated this 24th day of February, 1915.

HASELTINE, LAKE & Co.,
28, Southampton Buildings, London, England, and
60, Wall Street, New York City, U. S. A.,
Agents for the Applicant.

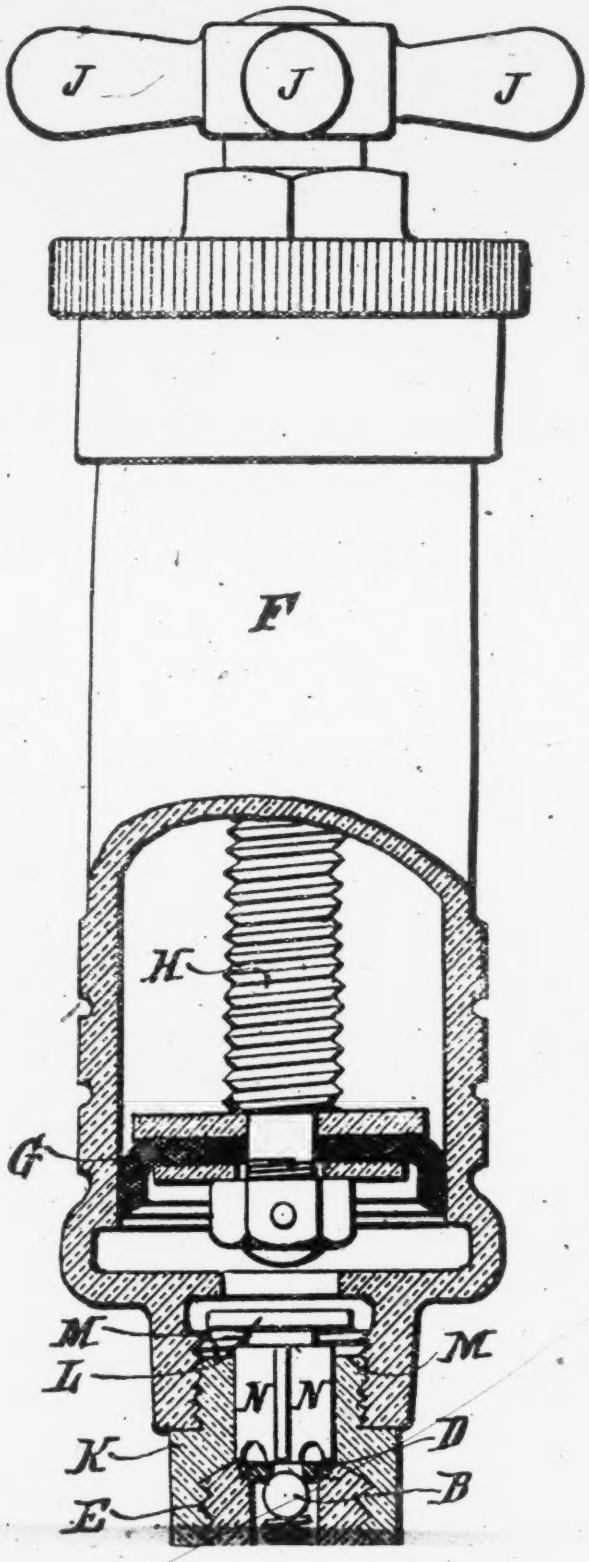
Hereford: Printed for His Majesty's Stationery Office, by The Hereford Times Ltd.
[Wt. 106A—50/10/1924.]

A.D. 1906. Oct. 4. N.° 21,893.

ALLEY & *another's* COMPLETE SPECIFICATION.

(1 SHEET)

[This Drawing is a full-size reproduction of the Original.]



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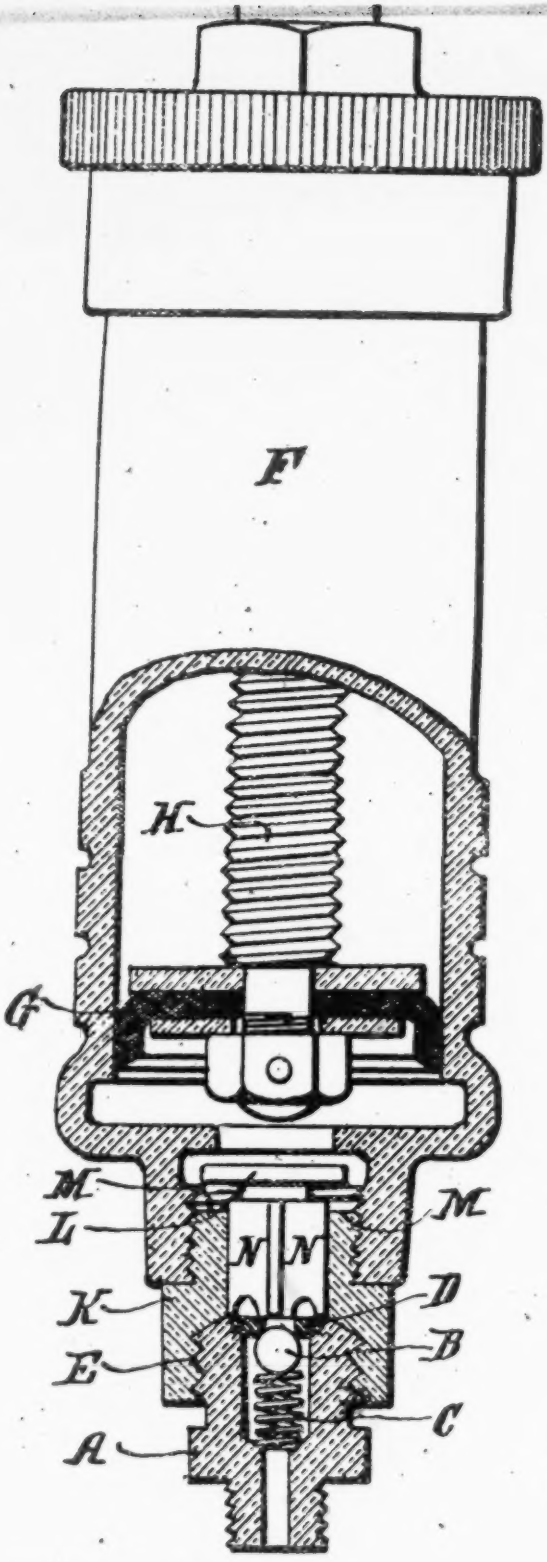

COMPLETE SPECIFICATION.

"Improvements in connection with Lubricators."

We, Stephen Evans Alley, of Sentinel Works, Polmadie, in the County of Glasgow, North Britain, Engineer, and George Woodvine, of the same address, Foreman Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement;—

Grease and heavy oil lubricators are usually made with removable caps by which they are filled by hand or from the inserted nozzle of a pump. This form is necessary as it is impossible to force the heavier oils and grease past the valve in those types of lubricators used for lighter oils and which have a self-closing filling valve. There are many objections to the use of the ordinary grease lubricators; the caps are easily mislaid, for instance, and in filling the lubricator, when it is in a dirty situation, one is very apt to introduce grit along with the grease.

This invention has for its object to adapt the self-closing valve type of light oil lubricator for use with heavy oil and grease; that is to say, to provide means for filling this form of lubricator with grease. The invention consists essentially in applying to a grease pump of known form a nozzle adapted to lock upon and form a tight connection with a light oil lubricator of the type referred to and adapted to receive the nozzle. Considerable pressure is required to force the grease past the lubricator valve and there is therefore provided in the pump nozzles a valve of known form closing the passage in the nozzle and adapted to be operated by the lubricator top when the pump is placed in position, this valve, of course, closes immediately the pump is withdrawn from the lubricator and so prevents the extrusion of grease then.

In order that the invention and the manner of performing the same may be properly understood, there is hereunto appended a sheet of explanatory drawings showing in sectional elevation an example of the carrying out of the novel combination.

According to this simple example the lubricator, A, is of the cylindrical type having a non-return ball valve, B, pressed by a spring, C, against a seat piece, D, secured in the top of the lubricator. The lubricator has cut upon its exterior a screw thread, E, of comparatively coarse pitch.

The pump, F, is of the ordinary barrel type in which a cup leather plunger, G, operated by a screwed rod, H, carrying a handle, J, forces the lubricant out through a nozzle, K. In this nozzle, K, is arranged a tappet valve, L, normally resting upon a seat, M, and so normally closing the normal aperture but the stem or rather guide wings, N, of the valve are of such a length that when the nozzle, K, is secured upon the lubricator, A, the wings, N, bear upon the top of the latter and the valve, L, is raised from its seat as shown in the drawing. Upon depression of the plunger, G, by operation of the handle, J, lubricant flows past the open valve, L, through the nozzle, K, to the lubricator, A, forcing the ball valve, B, therein off its seat.

Upon withdrawal of the pump from the lubricator the valves, B, L, immediately close—the former under the effort of the spring, C^1 the latter under the pressure of the lubricant in the pump.

Thus the awkward and messy operation of removing caps and filling them by means of a pump (which usually extrudes more grease than is required) or from an open can by means of the fingers or a stick is entirely obviated.

It is obvious that the means for securing the pump upon the lubricator may

be modified—for example, instead of a coarse pitch screw a bayonet or like catch may be used—and that the form of valve used in its nozzle may be varied.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

—1— A lubricating device comprising in combination a lubricator fitted with a non-return valve, a pump adapted to be connected therewith and a valve in the pump nozzle normally closed but opened automatically upon connection of the pump to the lubricator, as described.

—2— A lubricating device comprising in combination a lubricator of known cylindrical form externally screwed and containing a non-return valve, a pump of known form having a nozzle screwed counterpart to the lubricator, and a tappet valve on a seat within the nozzle and adapted to be raised off that seat by contact of its stem with the top of the lubricator when lubricator and pump are screwed together.

Dated this Eighteenth day of March, 1907.

EDMUND HUNT & Co.,
Chartered Patent Agents,
121 West George Street, Glasgow,
Applicants' Agents.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1907.

A.D. 1912. Aug. 15. N° 18,727
DE GREY'S COMPLETE SPECIFICATION. (1 SHEET)

[This Drawing is a reproduction of the Original on a reduced scale]

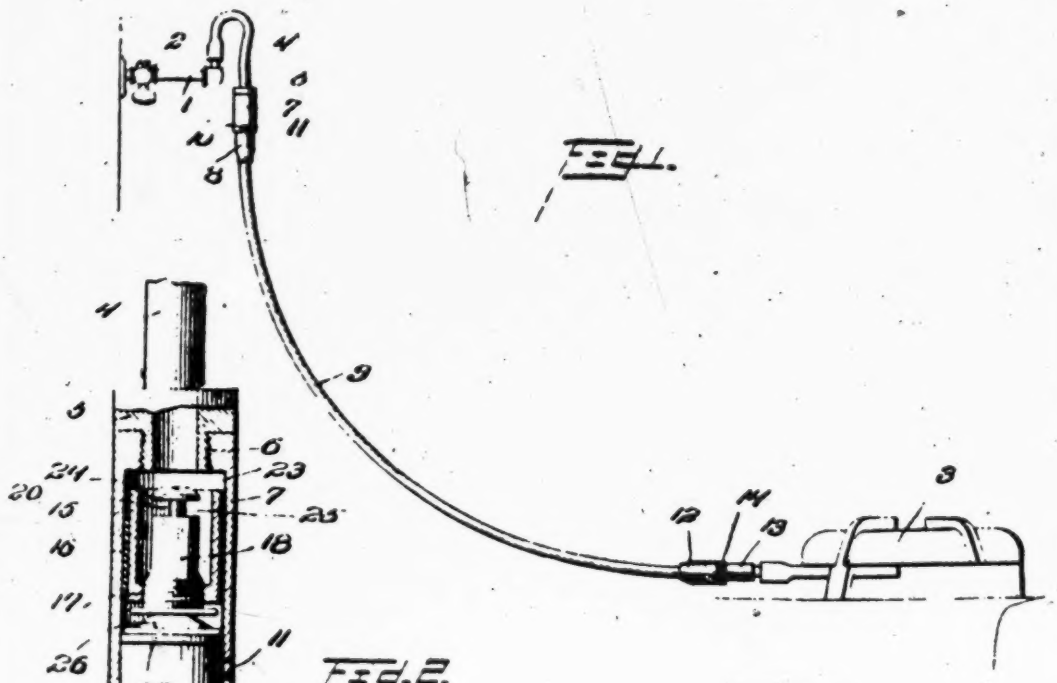

FIG. 1.

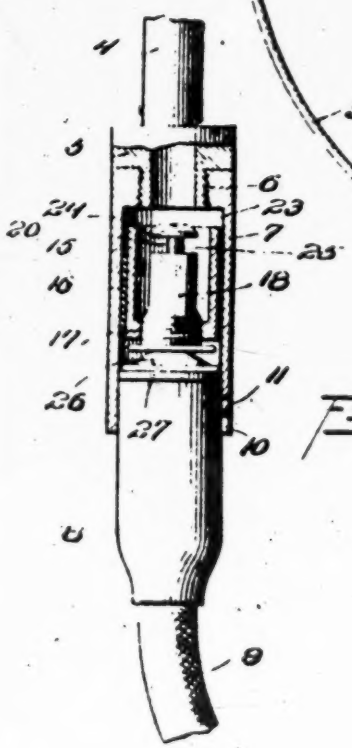

FIG. 2.

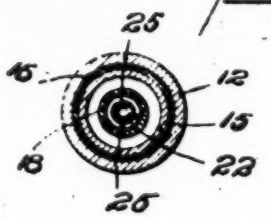

FIG. 4.

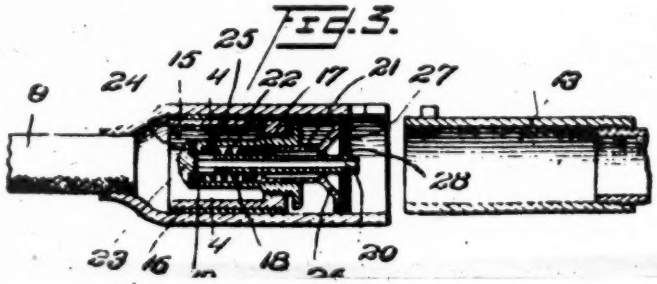

FIG. 3.

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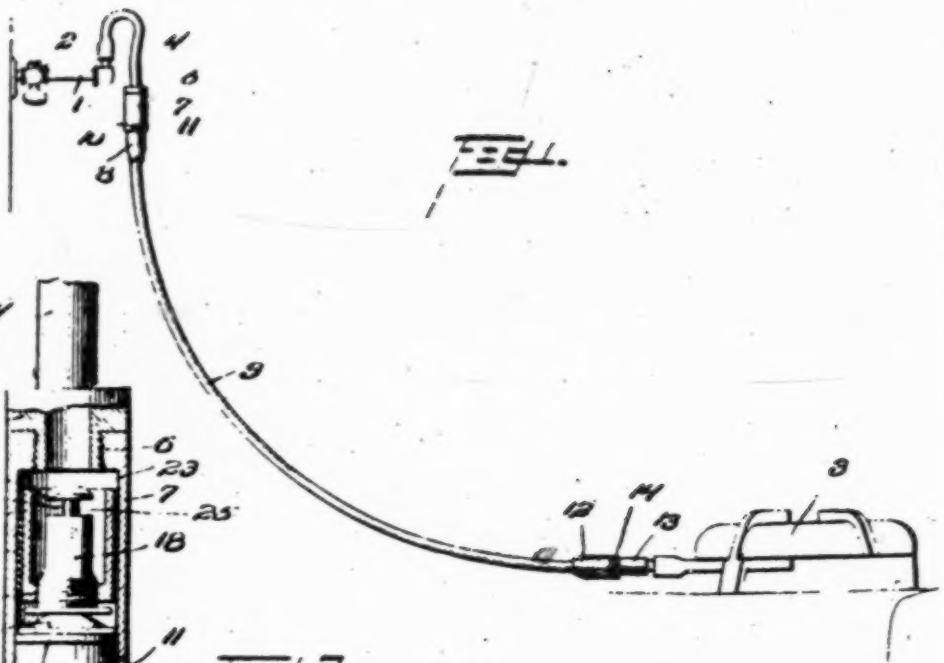


FIG. 1.

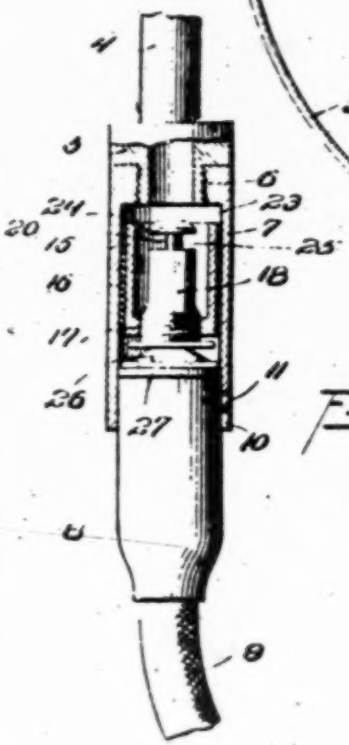


FIG. 2.

FIG. 4.

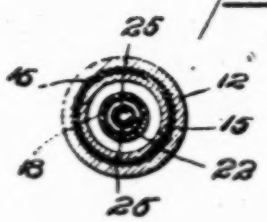
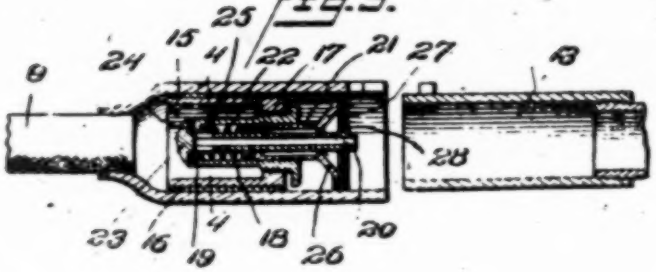


FIG. 3.



N° 18,727 A. D. 1912

(*Under International Convention.*)

Date claimed for Patent under Patents and Designs Act, 1907, being date of first Foreign Application (in the United States), } *15th Aug., 1911*

Date of Application (in the United Kingdom), 15th Aug., 1912

At the expiration of twelve months from the date of the first Foreign Application, the provision of Section 91 (3). (a) of the Patents and Designs Act, 1907, as to inspection of Specification, became operative

Accepted, 30th Jan., 1913

COMPLETE SPECIFICATION.

Safety Connections for Gas Fixtures.

I, Gerald de Grey, of 1588, N. 52nd Street, Philadelphia, in the County of Philadelphia, and State of Pennsylvania, United States of America, Clerk, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

My invention relates to safety connections for gas fixtures of the type in which a safety or non-return valve is provided and retained open by a tubular connection or abutment while the parts are assembled for use, the valve automatically closing by spring or the like pressure when the parts are again detached.

The object of the present invention is to provide an improved connection which can be utilized at both ends of a gas tube, one of which serves as a connection between the gas fixture or source of gas supply, and the tube, and the other between the tube and the burner or stove.

A further object is to provide a gas connection having two members, one adapted to telescope within the other and to be securely locked therein, and when so projected one within the other, the gas controlling valve will be opened, and when the members are separated either through accident or design, the valve will automatically close.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings:

Figure 1 is a view in elevation illustrating my improvements.

Figure 2 is a view partly in longitudinal section and partly in elevation illustrating the connection between the source of gas supply and the tube.

Figure 3 is a view in longitudinal section of the connection at the burner or stove, showing the two members apart, and

Figure 4 is a view in cross section on the line 4—4 of Figure 3.

[*Price 8d.*]

1 represents a gas bracket having the ordinary valve 2, and 3 is a burner or stove. On the gas bracket 1, a goose neck 4 is supported, and the enlarged lower end 5 of this goose neck is screw-threaded as shown at 6 to screw into the threaded end of member 7 of my improved connection.

Member 7, and its co-operating member 8, are both cylindrical in form, the latter fixed to a flexible gas tube 9, and adapted to telescope with in the member 7. Member 7 is provided with an L-shaped notch 10 to receive a pin 11 on member 8, so that an ordinary bayonet joint is formed to lock the members together.

On the opposite end of the tube 9, a member 12 is secured, and corresponds to the member 7. The member 13, which corresponds to member 8 is screwed onto the burner 3, and telescopes within member 12, and is secured by a bayonet joint 14, such as above described in connection with the members 7 and 8.

The members 7 and 12 each contain improved valve structures which are precisely alike, and in fact, these connections at the respective ends of the hose, are alike, except in the manner of attachment which necessitates a slight change in the structure.

As these valves are precisely alike, the description hereinafter of one will apply alike to both.

In cylindrical members 7 and 12, metal sleeves 15 are located, and are held by rubber sleeves 16 around the same, said rubber sleeves serving to make the connection gas tight. One end of metal sleeve 15 has a screw-threaded opening 17 to receive an externally screw-threaded tube 18.

At the inner end of this tube 18, an internal flange 19 is provided, and constitutes a guide for a tubular valve stem 20 which is secured in a guide sleeve 21 mounted to slide in tube 18.

Around the stem 20 in the sleeve 18, between the guide sleeve 21 and the flange 19, a coiled spring 22 is located, and normally holds a valve 23 secured to the inner end of stem 20 on its seat. That is, the valve 23 with its facing washer 24, is held against the end of tube 18, and openings 25 which are provided in the stem 20 adjacent the valve 23, are held within the tube 18, so that the passage of gas through the stem is prevented.

The forward end of the guide sleeve 21 is provided with a flaring disk 26 against which a disk 27 of rubber or other suitable material is positioned, and this disk 27 is provided with a central opening 28 through which the tubular valve stem 20 projects.

When the smaller member is forced inside of the larger member, it engages disk 27, and forces the valve stem 20 longitudinally against the action of the spring 22, so that the openings 25 are exposed back of the end of sleeve 18 as shown in Figure 2. The gas may then flow through the valve stem to the burner, as the bayonet joint above described secures the members in this position.

Should the members become separated either through accident or design, spring 22 will immediately close the valve and shut off the supply of gas, thus preventing any escape of gas and the danger which might result therefrom.

This automatic shutting off of the gas is true at either point of connection, because the valve is within the parts 7 and 12, so that if the connection is broken at either point, the gas will be shut off.

The parts are so constructed that the valve may be readily removed for purposes of repair, as it is simply necessary to draw the sleeve 15 with its outer rubber sleeve 16 from within the cylindrical section, and force it back into place when the valve is repaired.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

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Safety Connections for Gas Fixtures.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

1. An improved safety connection for gas fixtures, comprising in combination two cylindrical members, one member adapted to telescope within the other, means for locking the members in telescoped position, a valve in one member moved by the other to open position, said valve comprising a sleeve, a tubular stem movable through said sleeve and having openings therein, a valve on the end of said stem, a guide sleeve secured around said stem and movable in the first mentioned sleeve, a coiled spring around the stem pressing against the guide sleeve and normally holding the valve in closed position, a flaring disk on the end of said guide sleeve, a second disk against the guide sleeve and having an opening through which the stem projects, and said last-mentioned disk engageable by the smaller member, substantially as described.

2. A connection as claimed above, comprising in combination two cylindrical members, one member adapted to telescope within the other, means for locking the members in telescope position, a valve in one member moved by the other to open position, said valve comprising a sleeve, a tubular stem movable through said sleeve and having openings therein, a valve on the end of said stem, a guide sleeve secured around said stem and movable in the first-mentioned sleeve, a coiled spring around the stem pressing against the guide sleeve and normally holding the valve in closed position, a flaring disk on the end of said guide sleeve, a second disk against the guide sleeve and having an opening through which the stem projects, and said last-mentioned disk engageable by the smaller member, a sleeve frictionally held in the larger section, a packing sleeve around said last-mentioned sleeve, and said first-mentioned sleeve screwed into said frictionally held sleeve, substantially as described.

Dated this 15th day of August, 1912.

J. S. WITHERS & SPOONER,
Chartered Patent Agents,
323, High Holborn, London,
Agents for the Applicant.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1913.

A.D. 1912. Nov. 14. № 26,134.
SHARPE'S COMPLETE SPECIFICATION.

(1 SHEET)

[This Drawing is a reproduction of the Original on a reduced scale]

FIG. 1.

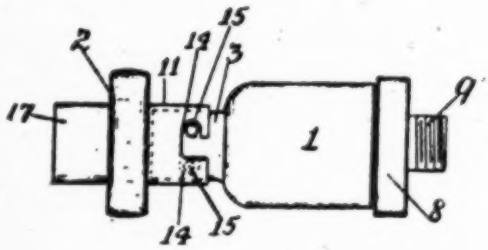

FIG. 2.

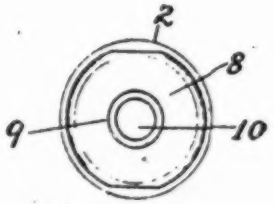

FIG. 3.

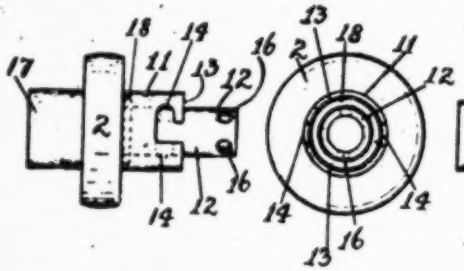

FIG. 4.

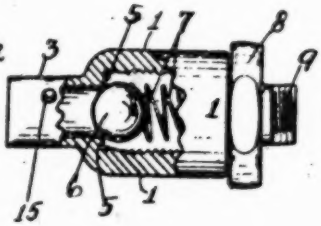

FIG. 5.

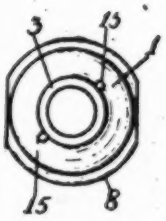

FIG. 6.

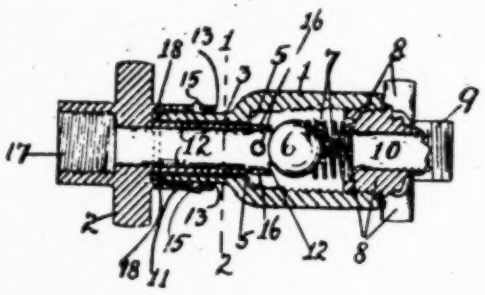

FIG. 7.

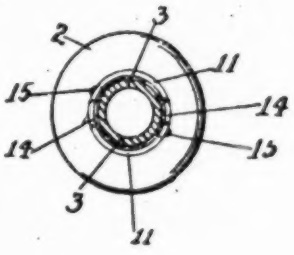

FIG. 8.

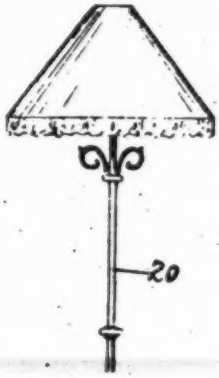

FIG. 9.

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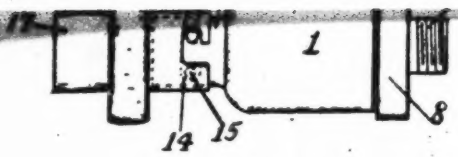


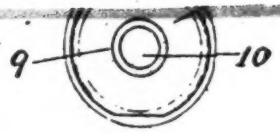


FIG. 3. FIG. 4. FIG. 5. FIG. 6.

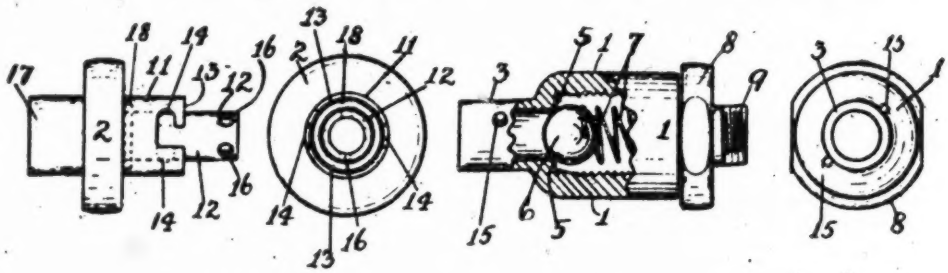
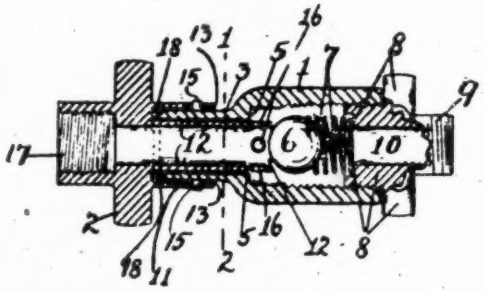


FIG. 7. FIG. 8.



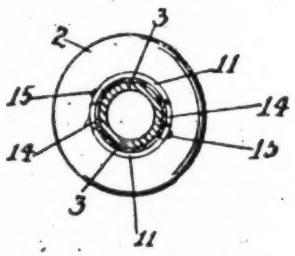
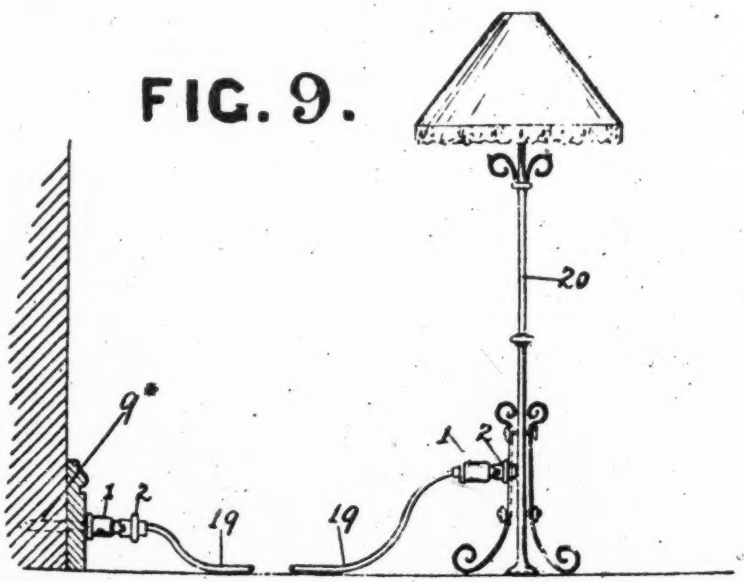


FIG. 9.



N° 26,134 A. D. 1912

Date of Application, 14th Nov. 1912

Complete Specification Left, 13th May, 1913—Accepted, 9th Oct., 1913

PROVISIONAL SPECIFICATION.

An Improved Coupling Device or Union for Connecting Flexible or other Tubing to Gas Brackets or Pipes, Water Pipes and the like.

I, William Charles Sharpe, Junior, of "Eastfield," Louth, in the County of Lincoln, Lighting and Heating Engineer, do hereby declare the nature of this invention to be as follows:—

This invention relates to an improved coupling device or union for use with flexible or other tubing or pipe connections, of say for instance, a portable gas standard lamp, portable reading lamp, gas bracket, pendant, gas stove or other device, for connecting such tubing or pipe connection to a gas bracket or supply pipe, and has for its object an extremely simple device whereby the flexible or other tubing or connection can be readily connected to and disconnected from the gas bracket or pipe from which the supply of gas is obtained, or it may be to the device for which the supply of gas or the like is required, without it being necessary to turn a tap to turn on or shut off the gas, the connecting or disconnecting of the device automatically effecting this.

In its broad essentials, my improved coupling device or union consists of two main portions, the one a hollow body portion adapted to be connected to a gas bracket or pipe, or the like, and provided with a seat inside it, and a ball, cone or the like backed by a spring to bear on the seat beforementioned under normal circumstances to close the outlet, that is, when gas or the like is not required for use, the second portion being also tubular and having a tubular extension provided with holes at or near its end to be passed into the outlet end of the first or body portion, and with a second tubular extension to which one end of the flexible tubing is connected, the said two main portions being adapted to engage by any suitable means, as for instance by one portion being provided with a peripheral projection, or more than one to engage a bayonet slot or slots in the other portion.

The first or body portion is provided with means whereby it con be connected to a gas bracket, or pipe or the like, aconvenient means consisting in providing the inlet end with a nipple adapted to be screwed into or on to said body portion and into or on to the end of the gas bracket, or into or on to a nipple with which the gas bracket, pipe or the like is provided.

When the first or body portion is fitted, the ball, cone or the like therein beds firmly on the seat in the said body portion and effectually closes the outlet so that gas cannot pass therethrough, said ball or the like being so firmly seated that there is no possibility of there being any escape of gas.

When it is required to obtain a supply of gas, for say a portable standard gas lamp as an instance, the second tubular or completing portion of the device to which the flexible tubing of the lamp is connected, is coupled to the first or body portion by pushing the perforated extension into the outlet end of the body portion, which act forces the ball or the like in the body portion off its seat, with the result that gas is free to pass between the ball or the like and

[*Price 8d.*]

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its seat and so through the holes in the tubular extension of the second or completing portion and into the flexible tubing and thence to the burner of the lamp, the two portions of the coupling or union being locked by giving the completing portion a part of a turn whereby the peg or pegs engage the bayonet slot or slots in the other portion, so effectually keeping the ball valve open.

By disconnecting the completing portion from the body portion, the ball valve is released and returns to its seat and so cuts off the gas supply.

A washer may be placed on the perforated extension of the completing portion of the device for the end of the outlet portion of the body portion to bed on when the connection is made, to entirely obviate any liability of gas escaping.

Although I have described my improved coupling device or union in its application to a gas bracket, pipe or the like, I would have it understood that I do not limit myself to its use as a coupling to a gas supply, but that it is suitable for a coupling where water is required, or for other purposes for which it could be satisfactorily used.

With a coupling or union in accordance with my invention, gas, water and like pipes or sources of supply can be easily and quickly tapped to obtain a supply of gas, water and the like for any movable or even other than movable device for which the supply is required the connection being as easily made or broken as an electric circuit is completed or broken by means of a wall or like plug.

Dated the Thirteenth day of November, 1912.

LOUIS E. KIPPAX,
Gough Chambers, Savile Street, Hull,
Patent Agent for the Applicant.

COMPLETE SPECIFICATION.

An Improved Coupling Device or Union for Connecting Flexible or other Tubing to Gas Brackets or Pipes, Water Pipes and the like.

I, William Charles Sharpe, Junior, of Clacton House, Heath Park, Romford, in the County of Essex, late of "Eastfield," Louth, in the County of Lincoln, Lighting and Heating Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to that kind of coupling for use with flexible tubing or the like for connecting portable standard lamps, reading lamps, gas stoves or the like with a gas bracket, or gas supply pipe or the like, to allow of gas being supplied to the lamp, stove or the like, and which consists of two tubular members, the one adapted to engage the other, the one member being screwed on or otherwise suitably connected to the gas supply pipe or the like and the other having connected to it the flexible tube or the like which makes connection with the lamp, stove or the like to which gas is to be supplied, by the engaging of which two tubular portions comprising the device, a valve is opened in the device which allows the gas to pass to the flexible tube or the like and thence to the lamp, stove or the like, and by the dis-connection of which two portions the valve is caused to close and shut off the supply of gas, without it being necessary to turn a tap to turn on or to shut off the gas supply.

The present invention has for its object to provide an extremely simple construction of coupling device of the type referred to in which the portion which acts on the valve to open it and through which the gas passes to the

tube and thence to the lamp, stove or the like for which a supply of gas is needed, is actually a part of one of the two main portions of the device, and the valve itself is of an extremely simple nature.

In order that my invention may be readily understood and carried into effect, I have appended hereunto a sheet of explanatory drawings of which Fig. 1 is a longitudinal view of my improved coupling device, Fig. 2 is a view looking in at the right hand end of same; Fig. 3 is a view of the tubular extension detached, and Fig. 4 is a view looking in at the right hand end of same. Fig. 5 is a view of the main or body portion partly in section, and Fig. 6 is a view looking in at the left hand end of same. Fig. 7 is a longitudinal section of the complete coupling, Fig. 8 is a section on the line 1—2 of Fig. 7 assuming Fig. 7 to be complete, and Fig. 9 shows by way of example, the application of my improved coupling to a gas supply pipe behind a skirting board to make connection with a standard lamp, two of the couplings being shewn, one connected to the gas supply pipe and the other to the lamp.

The same reference characters are employed to indicate the same parts in all the figures.

Referring to the drawings, 1 and 2 are two tubular portions, 1 being the main or body portion provided with a reduced end 3, the hole through such body portion being reduced in the reduced end to provide a seat 5 for a ball, cone or the like 6 which is normally maintained pressed into contact with the seat 5 to close the passage by a spring 7, one end of which bears on such ball, cone or the like, and the other against a screw plug or a suitable cap or other completing piece 8 which is provided with an externally or internally screw-threaded nipple or projection 9 having a central bore 10, adapted to be screwed into or on to the end of a gas bracket or a gas supply pipe 9* (Fig. 9) or into or on to a nipple or the like provided on such gas bracket, gas supply pipe or the like. The second tubular member 2 has two concentric portions or extensions 11 and 12 to provide an annular space 13 for the admission of the reduced end of the tubular member 1, the outer extension 11 being according to one and a convenient mode, provided with a bayonet slot or slots 14 to receive a projection or projections 15 on the reduced portion 3 of the body portion 1 to enable the two portions 1 and 2 to be locked together, the inner tubular portion 12 of the tubular portion 2 having a hole or holes 16 near its end and being sufficiently long for its end to press on the ball or the like 6 to force such ball or the like off its seat when the two portions 1 and 2 are placed together and locked, 17 being the extension of the second portion 2 to which one end of the flexible tubing which runs from the coupling to the gas lamp, stove or the like is connected. A leather, asbestos or other suitable washer 18 which would not be readily destroyed by the gas, is placed on the perforated extension 12 of the portion 2 for the end of the reduced portion 3 of the body portion to bed against to entirely obviate any liability of leakage of gas occurring when the two portions 1 and 2 are coupled up and the valve opened.

When the first or body portion 1 is connected to the gas bracket, gas supply pipe or the like, and the second portion 2 is not in engagement therewith, the ball cone or the like 6 beds so firmly on the seat 5 in such body portion 1 as to so effectually close the passage as to absolutely prevent any escape of gas.

Two of the couplings are preferably employed, one at each end of the flexible tubing or the like, the one to make the connection between the tubing or the like and the gas supply pipe, and the other to make the connection between the opposite end of the said tubing and the lamp, stove or the like for which a supply of gas is required, thereby to allow of coupling and uncoupling at either end of the tubing, the arrangement of each being such that uncoupling in each case releases the ball or like valve and allows it to return to its seat.

When it is required to obtain a supply of gas for say a portable standard gas lamp, by way of example, the tubular completing portion 2 of the coupling to which the flexible tubing 19 of the lamp 20 (Fig. 9) is connected, is coupled

to the first or body portion 1 by pushing the perforated extension 12 into the reduced outlet end 3 of the body portion 1, if the body portion 1 is the fixed portion, which act forces the ball or the like 6 off its seat 5, with the result that gas is free to pass between the ball or the like and its seat and so through the holes 16 in the extension 12 of the second or completing portion 2 and into the flexible tubing 19 and thence to the burner of the lamp, the two portions of the coupling being locked as hitherto by giving the portion 2 a part of a turn whereby the projection or projections 15 on the portion 1 engage the bayonet slot or slots 14 in the outer extension 11 of the portion 2, so effectually keeping the ball or the like off its seat. By disconnecting the portion 2 from the portion 1, the ball or the like 6 is released and returns to its seat and so cuts off the gas supply.

Although I have described my improved coupling or union in its application to a gas bracket, gas supply pipe or the like, I would have it understood that I do not limit myself to its use as a coupling to a gas supply, but that it is suitable as a coupling where water is required, or for other purposes for which it could be satisfactorily used.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

(1) In a coupling or union of the type specified for the purpose mentioned, a tubular portion having a seat therein, a ball, cone or the like to normally bed on such seat, a spring backing the ball or the like and bedding against a screw plug or the like in such body portion, said plug or the like having a nipple or the like adapted to screw into or on to the pipe, or a nipple or the like from which the supply of gas, water or the like is being taken, a second tubular portion or completing piece having a perforated extension adapted to pass into one end of the main or body portion and a second or outer portion to pass over said end of the main or body portion and provided with means to engage such body portion whereby the two portions become locked together and as a result the ball or the like is forced off its seat by the perforated extension of the second or completing portion, the said second or completing portion being adapted to receive the flexible tubing or the like which forms the connection between the coupling and the device to be supplied with gas or the like, or itself to be connected to the lamp or the like to be supplied with gas and the main or body portion to take the end of the tubing.

(2) The improved coupling substantially as hereinbefore described and illustrated in the accompanying drawing, and operating as and for the purpose set forth.

Dated the Tenth day of May, 1913.

LOUIS E. KIPPAX,
Gough Chambers, Savile Street, Hull,
Patent Agent for the Applicant.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1913.

Fig.1.

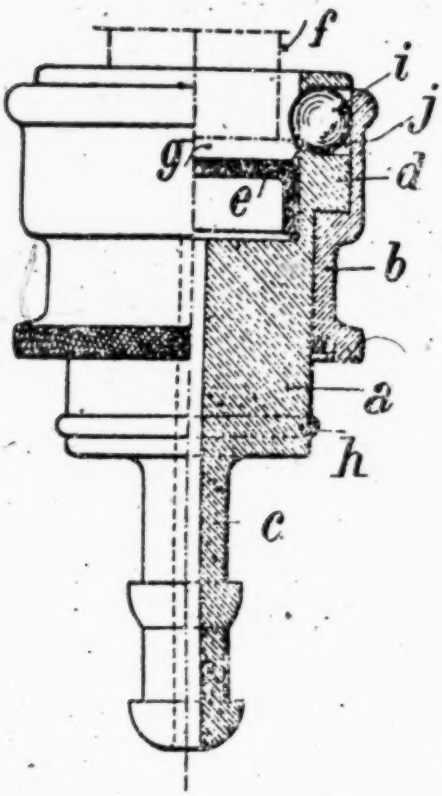


Fig. 2

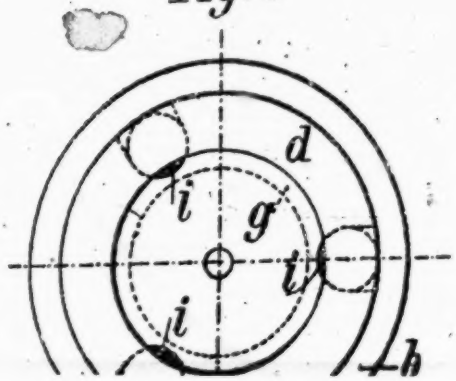


Fig. 1.

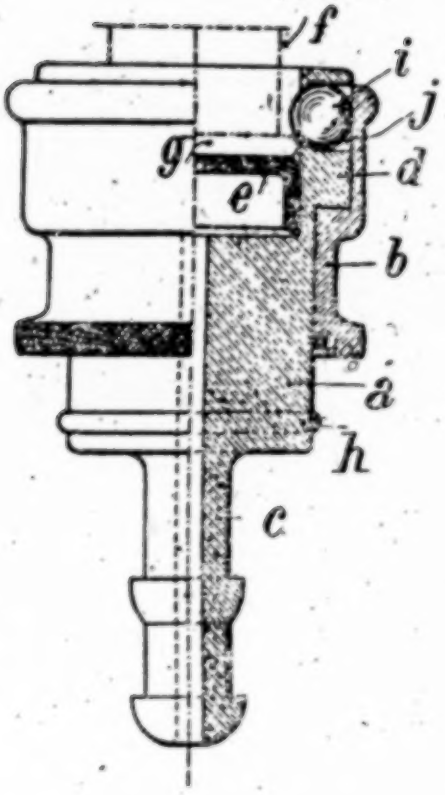
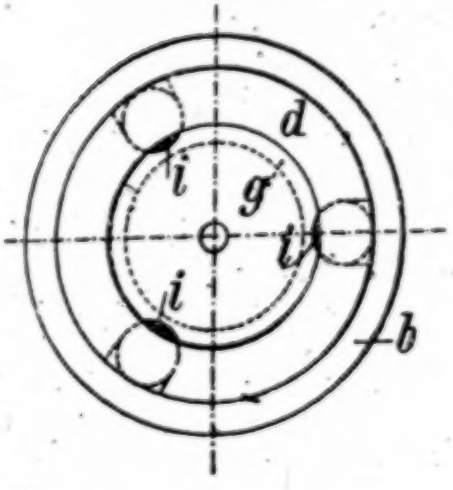


Fig. 2



RÉPUBLIQUE FRANÇAISE.

OFFICE NATIONAL DE LA PROPRIÉTÉ INDUSTRIELLE.

1RE ADDITION
AU BREVET D'INVENTION
N° 468,869

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U. S. Patent Office

V.—Machines.

3.—ORGANES, ACCESSOIRES ET ENTRETIEN DES MACHINES. N° 20.083

Dispositif de raccord instantané pour fluides sous pression et application du dit raccord pour le graissage sous pression.

M. CAMILLE SENG, résidant en France (Aube).

(Brevet principal pris le 24 février 1914.)

Demandée le 23 décembre 1914, à 15 heures, à Paris.
Délivrée le 28 décembre 1915.—Publiée le 22 mars 1916.

La présente addition est relative à une variante de forme d'exécution du dispositif de raccord instantané faisant l'objet du brevet n° 468.869 en date du 24 février 1914.

La caractéristique distinctive de cette variante d'exécution consiste en ce que les griffes constituant les organes d'accouplement du dispositif décrit dans le brevet, sont remplacées par des billes jouant le même rôle.

Sur le dessin annexé et à titre d'exemple:

La fig. 1 représente, partie en élévation, partie en coupe verticale, une forme de réalisation du nouveau raccord.

La fig. 2 est une vue correspondante en plan.

Ce nouveau raccord se compose comme celui décrit au brevet principal, d'un corps tubulaire *a*, chaussé d'une douille de manœuvre *b* susceptible de coulisser sur le corps *a*.

A l'une de ses extrémités, le corps *a* est rétréci de manière à former une tubulure *c* destinée à recevoir le tuyau reliant le raccord à l'appareil d'alimentation: graisseur, pompe ou autre. A son extrémité opposée, le corps *a* forme une tête évidée *d* dans laquelle est logée une rondelle d'étanchéite *e* constituee par un cuir embouti, contre lequel s'applique l'extrémité de la tubulure *f* de l'appareil d'utilisation à raccorder. Cette tubulure *f* comporte à son extrémité un bourrelet *g* avec lequel vient en prise un certain nombre de billes *i* (trois dans l'exemple représenté), disposées à équidistance les unes des autres dans des trous radiaux *j* de la tête *d*.

L'épaisseur de la partie annulaire de la tête *d* et le diamètre des billes *i* sont établis de telle manière que les dites billes font saillie à l'intérieur de l'évidement de la tête *d* lorsque, la douille *b* étant poussée, ces billes s'appliquent contre la paroi interne de la dite douille.

Une bague fendue *h* logée dans une gorge du corps *a* fait saillie autour de celui-ci, afin de limiter la course de déplacement de la douille *b*. Cette course est établie de façon que lorsque la douille *b* est attirée vers l'arrière elle permet le dégagement des billes *i*, mais recouvre encore suffisamment les trous *j* pour empêcher les dites billes de s'échapper.

Dans ces conditions, pour raccorder le corps tubulaire *a* sur la tubulure *f* il suffit,

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après avoir préalablement déplacé la douille *b* vers l'arrière, d'introduire la dite tubulure *f* dans la tête *d*, de façon que le bourrelet *g* s'applique contre la rondelle d'étanchéité *e*, entre celui-ci et les billes *i*. Dès que les pièces sont ainsi en contact, on pousse la douille *b*. Ce mouvemant a pour effet de faire converger les billes *i* vers l'axe du raccord, de sorte qu'elles glissent contre la partie arrière du bourrelet et l'obligent à s'appliquer avec pression contre la rondelle d'étanchéité *e*.

Pour dégager le raccord, il suffit d'attirer la douille *b* vers l'arrière.

Dans ce nouveau raccord, les manœuvres de raccordement et de désaccouplement peuvent se faire très aisément à l'aide d'une seule main, le seul mouvement à effectuer consistant à faire coulisser rectilignement la douille *b* sous le corps *a*, ce qui d'ailleurs s'effectue par le fait même de l'introduction ou du retrait du raccord.

Ainsi que cela a été indiqué dans le brevet principal, ce dispositif de raccord s'applique généralement pour la jonction de deux tronçons d'une canalisation de fluide quelconque, mais a été plus particulièrement imaginé pour réaliser un graissage sous pression.

Il est à remarquer que la pression du fluide s'exerce à l'intérieur de la chambre formée par le cuir embouti *c* dans le sens de l'application de ce cuir contre l'extrémité de la tubulure *f*.

RÉSUMÉ.

Variante de forme d'exécution du dispositif de raccord faisant l'objet du brevet principal n° 468.869 en date du 24 février 1914, caractérisée en ce que les organes d'emprise du raccord tubulaire avec la tubulure à raccorder consistent en des billes logées dans des trous radiaux du dit raccord et convergeant vers l'axe de celui-ci, pour s'engager avec la dite tubulure lorsqu'on pousse la douille de manœuvre rectilignement dans le sens d'application du raccord, les dites billes se dégageant d'elles-mêmes lorsqu'on tire sur la douille dans le sens du désaccouplement.

CAMILLE SENG.
Par procuration:
Dupont et Elluin.

Pour la vente des fascicules, s'adresser à l'Imprimerie Nationale, 87, rue Vieille-du Temple. Paris (3°).

Fig. 1.

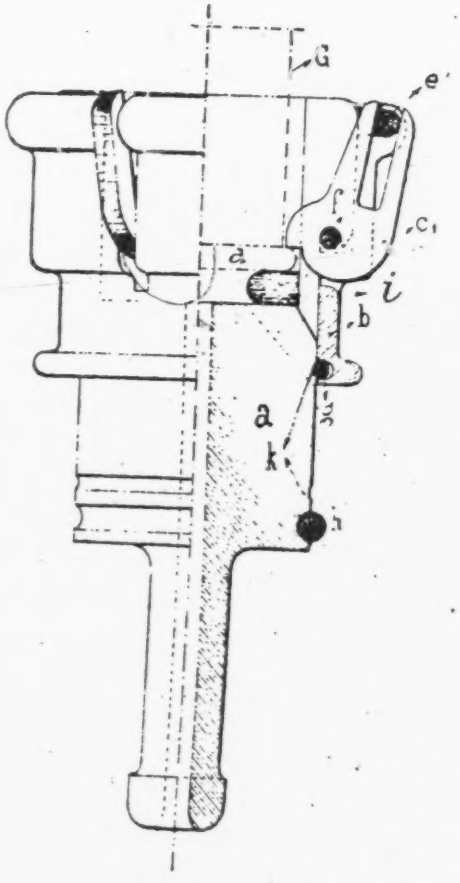


Fig. 3.

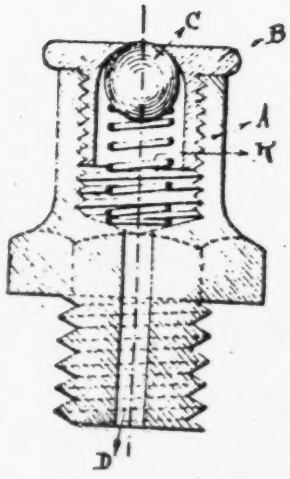


Fig. 2.

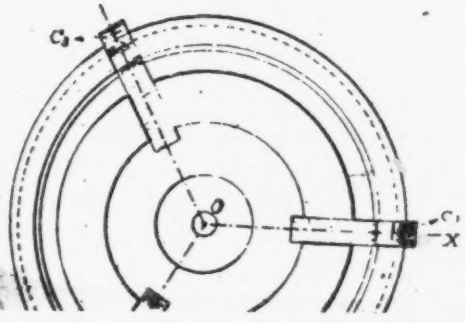


Fig. 4.

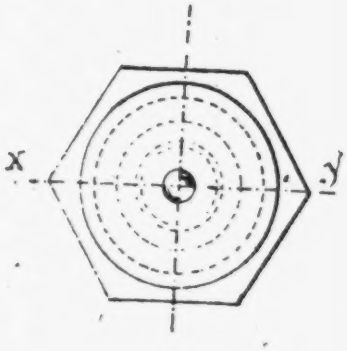


Fig. 1.

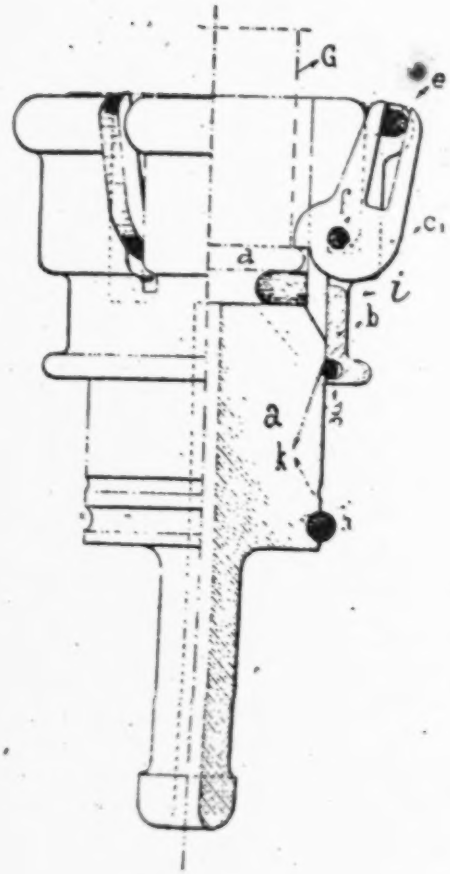


Fig. 2.

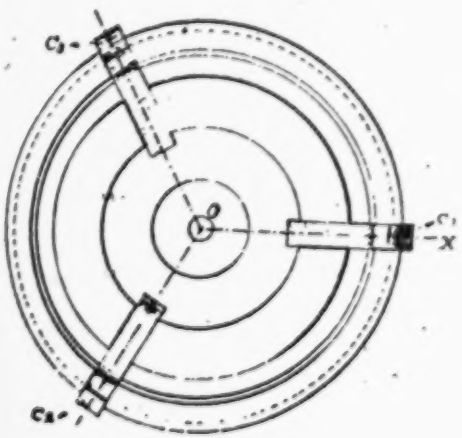


Fig. 3.

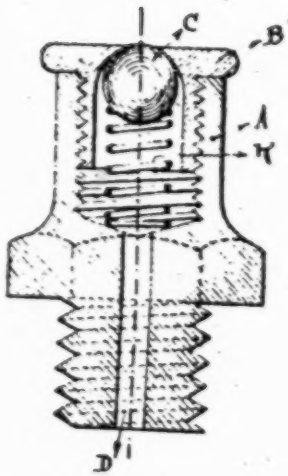
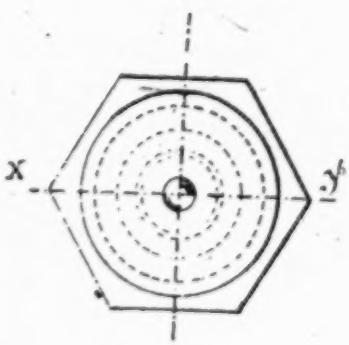


Fig. 4.



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BREVET D'INVENTION

V.—Machines.

3.—ORGANES, ACCESSOIRES ET ENTRETIEN DES MACHINES. N° 468.869

Dispositif de raccord instantané pour fluides sous pression et application du dit raccord pour le graissage sous pression.

M. CAMILLE SENG résidant en France (Aube).

Demandé le 24 février 1914, à 11h 55m, à Paris.

Délivré le 5 mai 1914.—Publié le 18 juillet 1914.

La présente invention a pour objet un dispositif de raccord instantané pour fluides sous pression, lequel se caractérise essentiellement en ce que les deux parties de l'accouplement sont solidarisées ou séparées l'une de l'autre par le déplacement longitudinal, sur l'une des dites parties, d'une douille de manœuvre destinée à actionner des leviers, griffes ou autres organes d'assemblage; ces organes venant ou non en prise avec l'autre partie de l'accouplement qui posséde, dans ce but, un bourrelet d'engagement ou autre moyen équivalent. Plus particulièrement, le raccord peut être constitué par un corps possédant un chambrage à l'intérieur duquel peut être introduite l'autre partie de l'accouplement qui s'appuie sur une garniture élastique assurant l'étanchéité du joint. La liaison s'opère au moyen de griffes qui font saillie dans le chambrage et qui sont articulées dans des fentes du raccord, les dites griffes étant prolongées au-delà de leur articulation par des bras rainurés qui pénètrent dans des fentes de la douille de manœuvre et sont entraînées par cette dernière au moyen d'axes pénétrant dans les rainures des dits bras.

Ce système de raccord instantané trouve plus particulièrement son application dans le cas où il s'agit de réaliser un graissage sous pression au moyen d'huile, de graisse consistante, etc. Dans se cas, le raccord, qui est réuni au tuyau du mécanisme de refoulement: pompe ou autre, peut être fixé à volonté, par la manœuvre de la douille entraînant les griffes, sur le bourrelet d'agrafage dont le graisseur doit être muni dans ce but. Ce bourrelet peut être formé sur un chapeau qui ferme le graisseur et qui comporte une ouverture constituant un siège pour un obturateur soumis à l'action d'un ressort intérieur.

Sur les dessins annexés et à titre d'exemple:

La fig. 1 représente, partie en élévation, partie en coupe verticale, une forme de réalisation du dispositif de raccord instantané faisant l'objet de l'invention.

La fig. 2 en est une coupe correspondante en plan.

Les fig. 3 et 4 montrent respectivement en coupe verticale suivant XY et en plan une forme de réalisation d'un graisseur à bille, qui a été plus particulièrement étudié pour se combiner avec le dispositif de raccord instantané, dans le cas de graissage sous pression.

Le dispositif de raccord instantané se compose de deux parties principales: d'une part, un corps *a*, d'autre part une douille de manœuvre *b* susceptible de coulisser sur le corps *a*.

La corps *a*, qui constitue une sorte de cuvette destinée à recevoir l'organe sur lequel le

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raccord doit être fixé, porte dans le rebord définissant la dite cuvette un certain nombre de fentes recevant respectivement des leviers c^1, c^2, c^3 formant griffes. Ces leviers c^1, c^2, c^3 sont articulés sur le corps *a*, au moyen d'un fil *f* se logeant dans une gorge convenablement disposée à cet effet. Les leviers X^1 pénètrent également dans des fentes correspondantes ménagées dans la douille *b*, qui peut être déplacée longitudinalement par rapport au corps *a*. Chaque levier est pourvu d'un bec d'accrochage faisant saillie dans la cuvette du corps *a* et constitue, par son autre bras, une fourche de manœuvre. Les fourches de manœuvre sont solidarisées par un fil *e* disposé dans une gorge de la douille déplaçable *b*. Cette dernière porte également, dans une gorge, un autre fil *g* qui peut venir, lors de ses déplacements dans un sens ou dans l'autre, s'engager dans des rainures *k* ménagées sur le corps *a*, ce qui l'immobilise dans les positions extrêmes qu'elle peut ainsi occuper. Un fil *h* sert en outre de butée.

Un anneau de caoutchouc *i* est disposé au fond de la cuvette et sert d'appui à l'organe à accoupler G, les griffes c^1, c^2, c^3 agissant pour l'appliquer sur le dit anneau *i* qui se comprime et forme ainsi joint étanche.

On voit que dans la position (fig. 1), la douille *b* étant repoussée sur le corps *a* et vers l'organe à accoupler G, les griffes c^1, c^2, c^3 font saillie à l'intérieur du corps *a* et, prenant appui sur le bourrelet *d* de l'autre partie de l'accouplement G, l'appliquent sur l'anneau interne de caoutchouc *i*. On remarque que toute traction opérée sur le corps *a* ne peut en aucun cas provoquer le désaccouplement.

Au contraire, en attirant la douille *b*, le fil *e* appartenant à cette dernière bascule les leviers c^1, c^2, c^3 et permet le dégagement de l'organe G précédemment accouplé ; la douille *b* étant immobilisée en cette position par l'engagement du fil *g* dans la gorge correspondante *k*.

Ce dispositif de raccord instantané, qui peut être utilisé pour assurer la jonction de deux canalisations où circule tout fluide et, en particulier, tout fluide sous pression, peut être particulièrement utilisé quand il s'agit de réaliser un graissage sous pression par de l'huile ou de la graisse consistante. Dans ce but, on peut avoir recours à un dispositif de graisseur à bille formant obturateur et comportant un bourrelet extérieur pour l'accrochage et la fixation du raccord (fig. 1 et 2).

Comme on le voit en fig. 3, 4, ce graisseur est constitué par un corps chambré A, percé d'un canal D formant conduit pour le lubrifiant. Un prolongement fileté permet la mise en place du graisseur. Dans le chambrage, qui est fileté intérieurement, se visse un bouchon B portant le bourrelet sur lequel se fixent les griffes c^1, c^2, c^3 du raccord (fig. 1, 2), pour réaliser l'accouplement avec la pompe destinée à refouler le lubrifiant. Dans l'exemple représenté, le bouchon B est, en outre, évidé intérieurement pour recevoir une bille *c*, qu'un ressort interne R pousse constamment pour assurer la fermeture du graisseur.

RÉSUMÉ.

1° Raccord instantané, caractérisé en ce que les deux parties de l'accouplement sont solidarisée ou séparées l'une de l'autre par le simple déplacement longitudinal, sur l'une des dites parties, d'une douille de manœuvre ; cette dernière déterminant la manœuvre de leviers, griffes ou autres organes de fixation qui appartiennent à la partie correspondante de l'accouplement et qui font ainsi saillie ou non à l'intérieur de cette dernière, pour assujettir ou libérer l'autre partie qui y est engagée.

2° Forme de réalisation du raccord instantané spécifié en 1°, caractérisé en ce que dans des fentes d'un corps chambré comportant intérieurement un anneau de joint et d'étanchéité, sont disposés des leviers ou griffes articulés, se prolongeant par des bras en forme de fourche ; ces leviers étant déplacés de manière à ce que leur nez fasse ou non saillie dans le chambrage, pour prendre appui sur on libérer le bourrelet appartenant à l'autre partie de l'accouplement, lorsqu'on déplace longitudinalement une douille coulissante sur le corps ; cette douille présentant des fentes pour les leviers ou griffes et portant un dispositif d'entraînement pénétrant dans les bras rainurés de ces derniers.

3° Application du raccord spécifié en 1° ou 2°, plus particulièrement dans le cas de graissage sous pression, caractérisée en ce que le raccord qui dépend, par exemple, du tuyau

de refoulement d'une pompe, se fixe ou se sépare à volonté du graisseur qui comporte, dans ce but, un bourrelet ou autre moyen d'accrochage se conjuguant avec les griffes ou leviers de fixation; le bourrelet de fixation appartenant à un bouchon qui ferme le corps du graisseur et dont l'ouverture forme siège pour un obturateur; bille ou clapet, soumis à l'action d'un ressort interne.

CAMILLE SENG.

Par procuration:

Dupont et Elluin.

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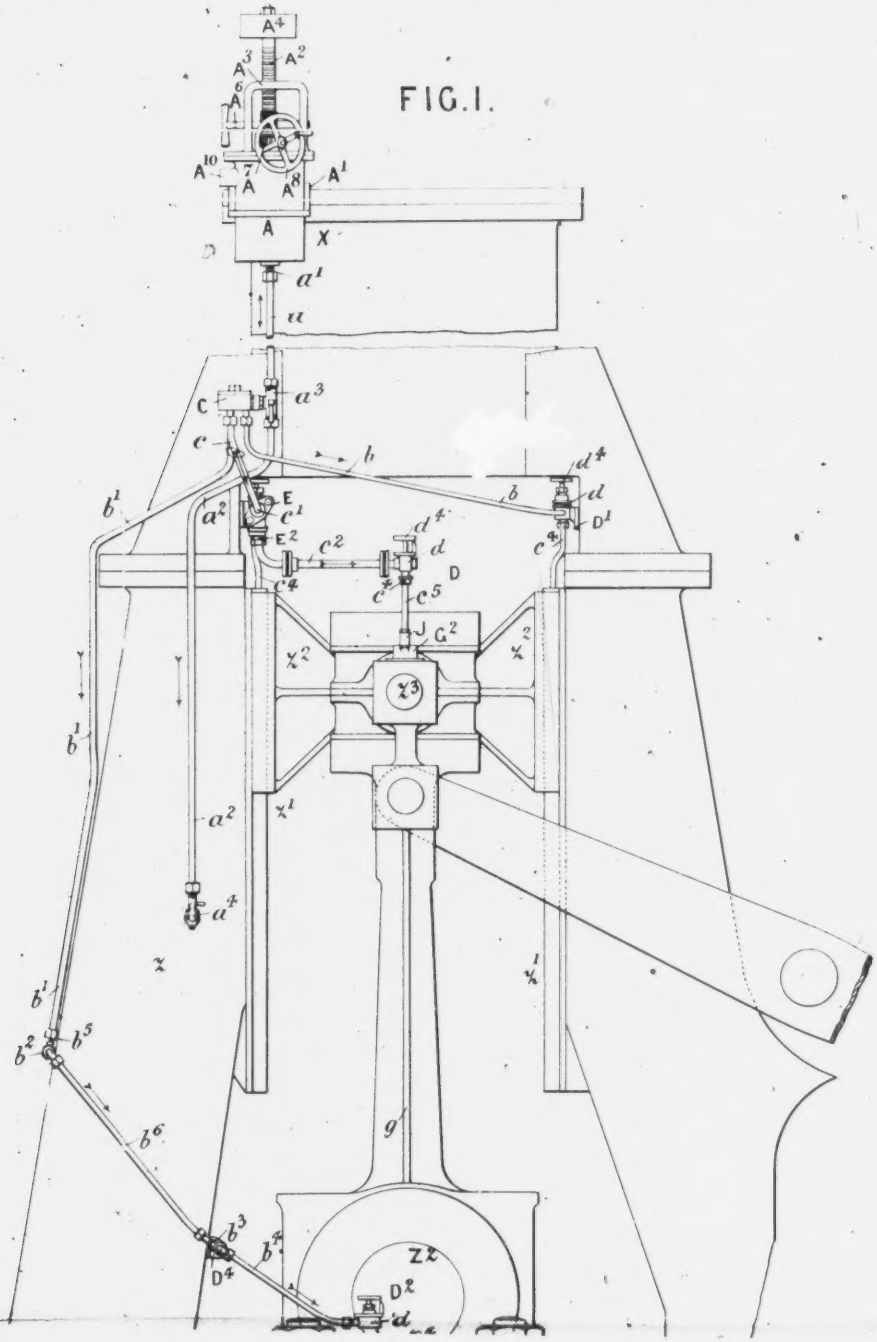
A. G. HAY & M. McINTYRE.

LUBRICATOR.

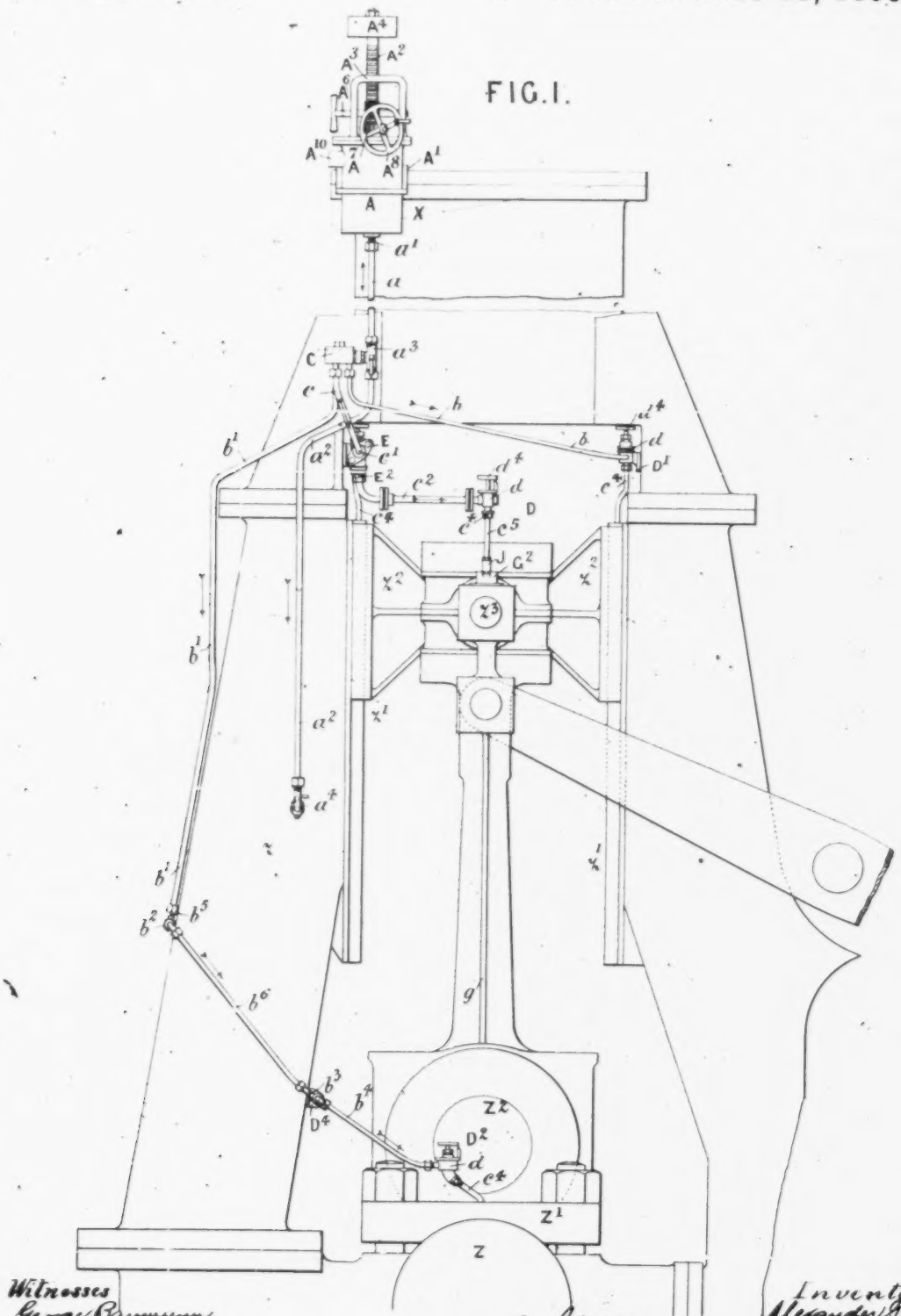
No. 499,541. Patented June 13, 1893.

FIG. 1.



No. 499,641. Patented June 13, 1893.

FIG. 1.



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Malcolm McIntyre

By their Attorneys
Howson and Howson

491

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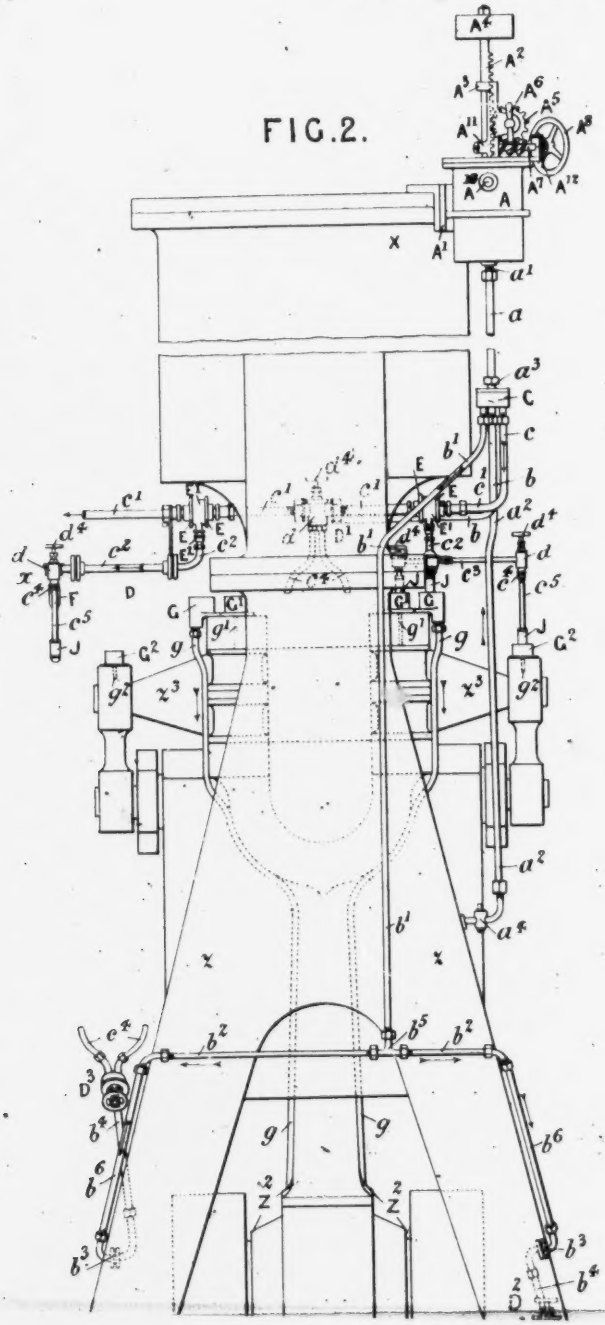
A. G. HAY & M. McINTYRE.

LUBRICATOR.

No. 499,541. Patented June 13, 1893.

FIG. 2.



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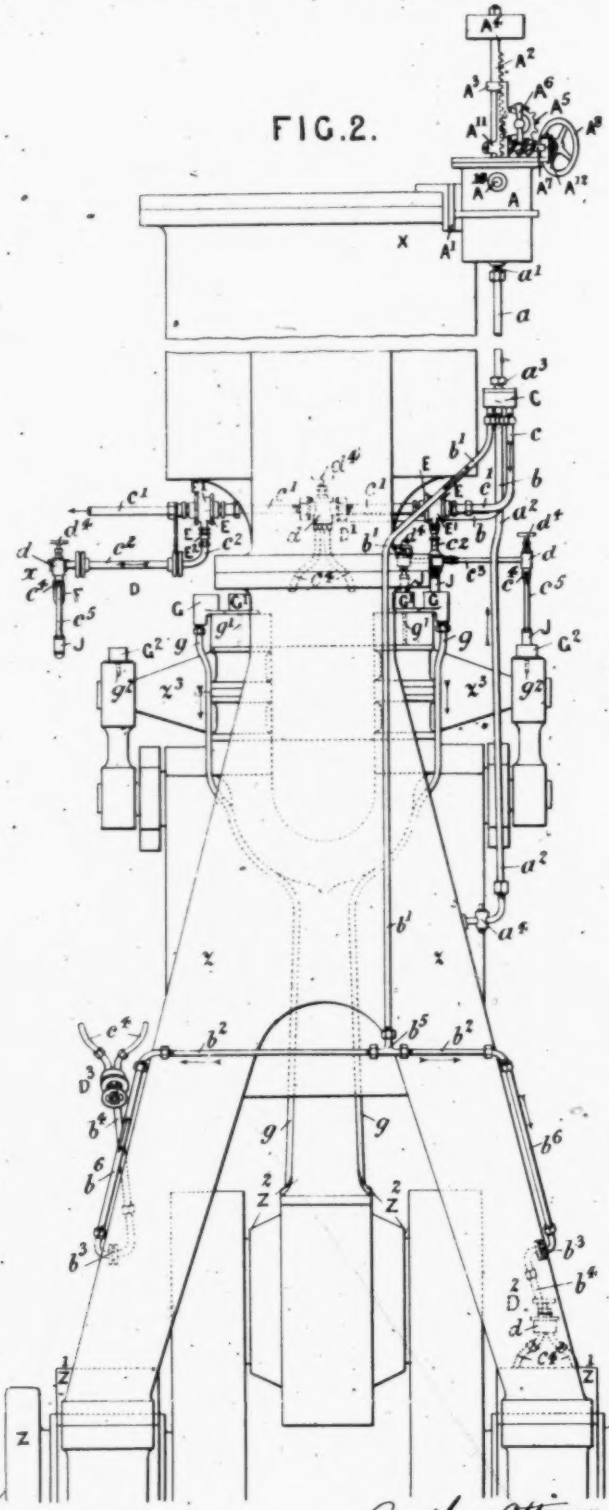

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John Revell

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Malcolm McStyle
By their Attorneys
Norman Stowell

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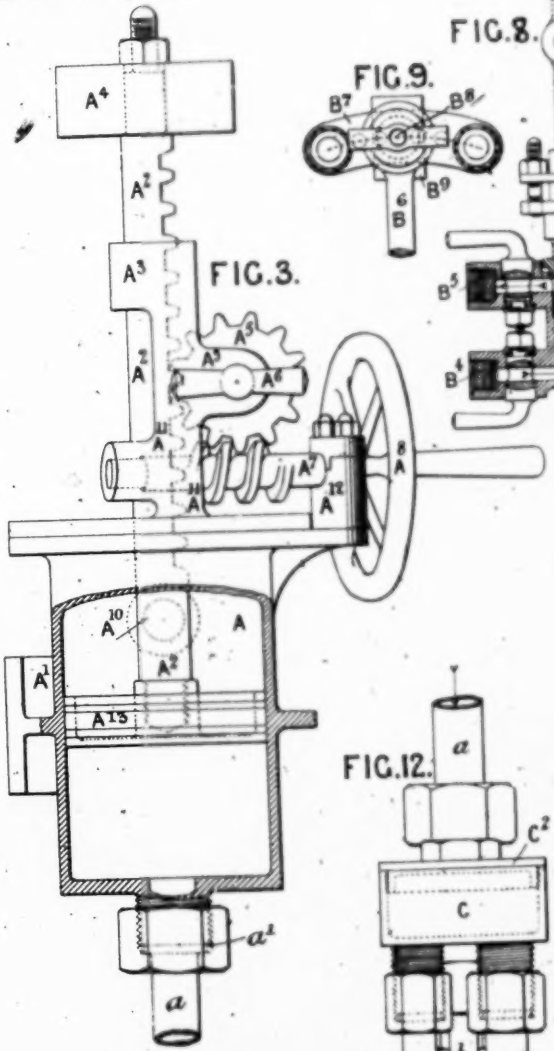
A. G. HAY & M. McINTYRE.

LUBRICATOR.

No. 499,541. Patented June 13, 1893.

FIG. 3.



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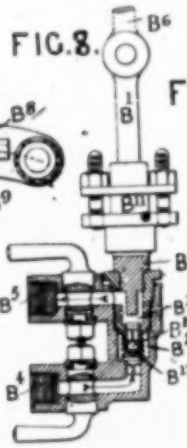
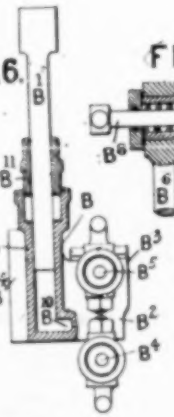


FIG. 9.

FIG. 6.



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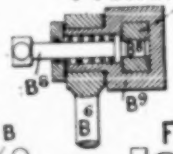

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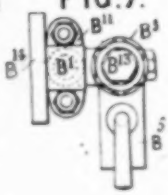


FIG. 11.

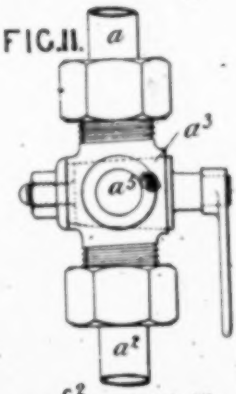


FIG. 12.

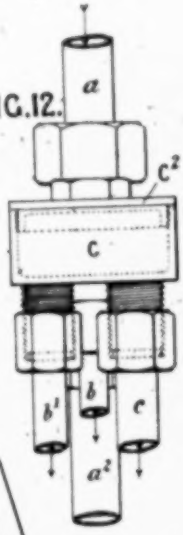


FIG. 13.

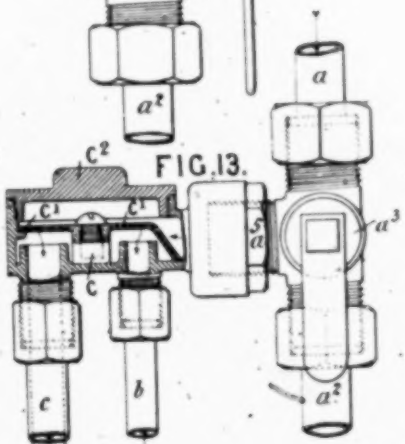


FIG. 4.

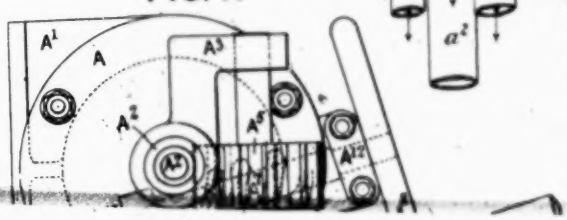
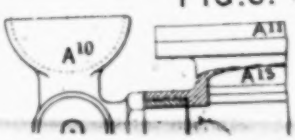
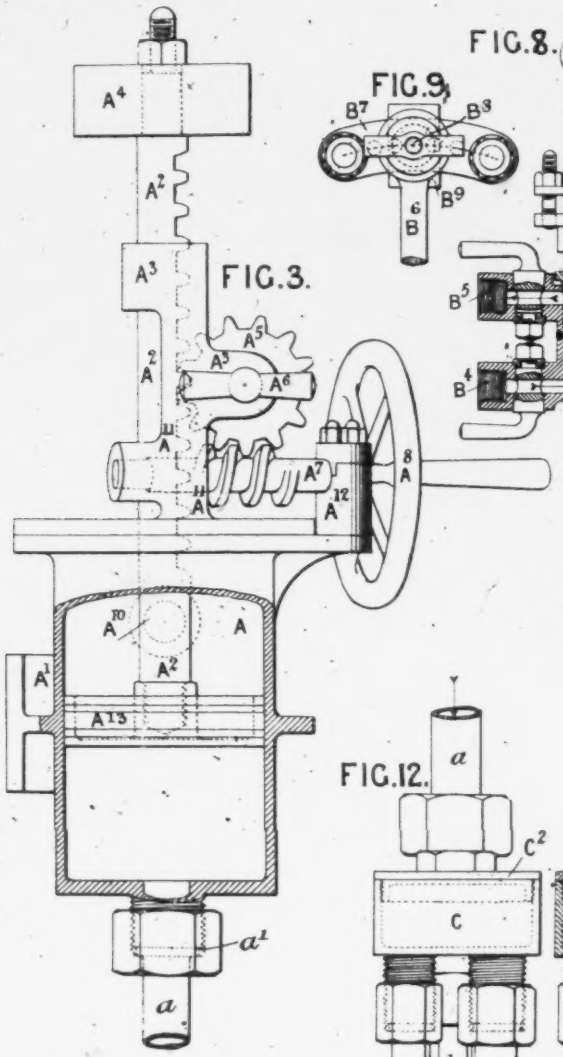
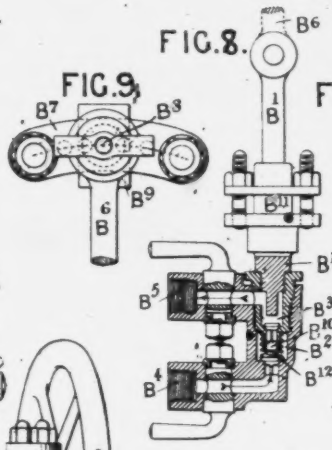


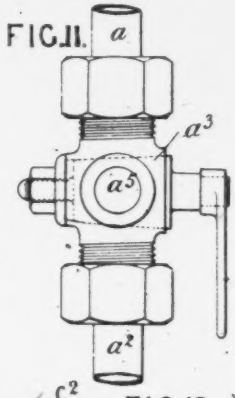
FIG. 5.

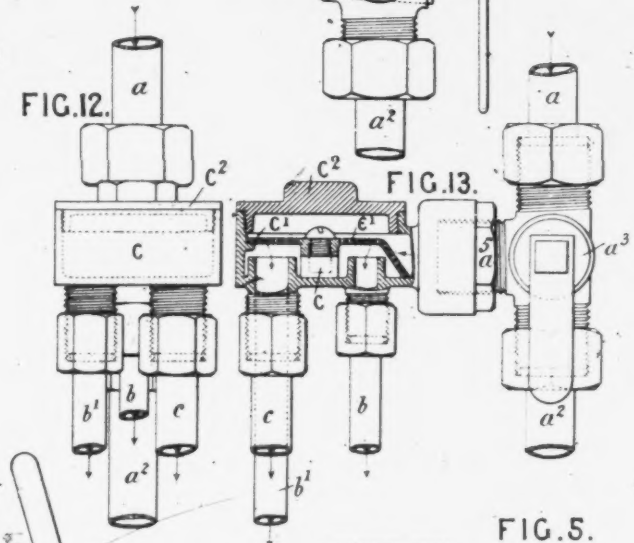


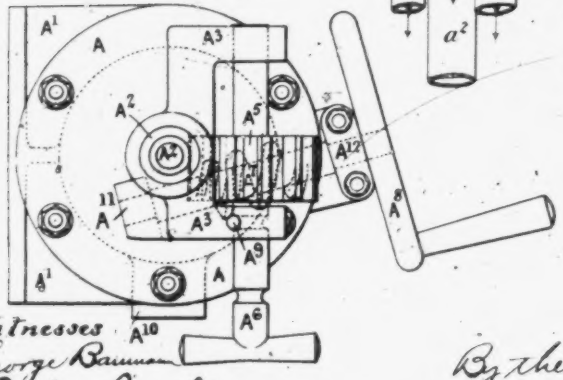
No. 499,541. Patented June 13, 1893.

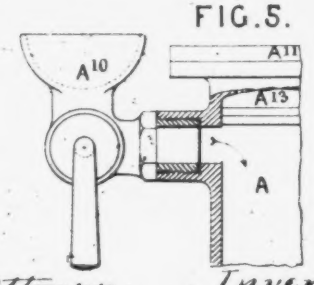












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(No Model.)

4 Sheets—Sheet 4.

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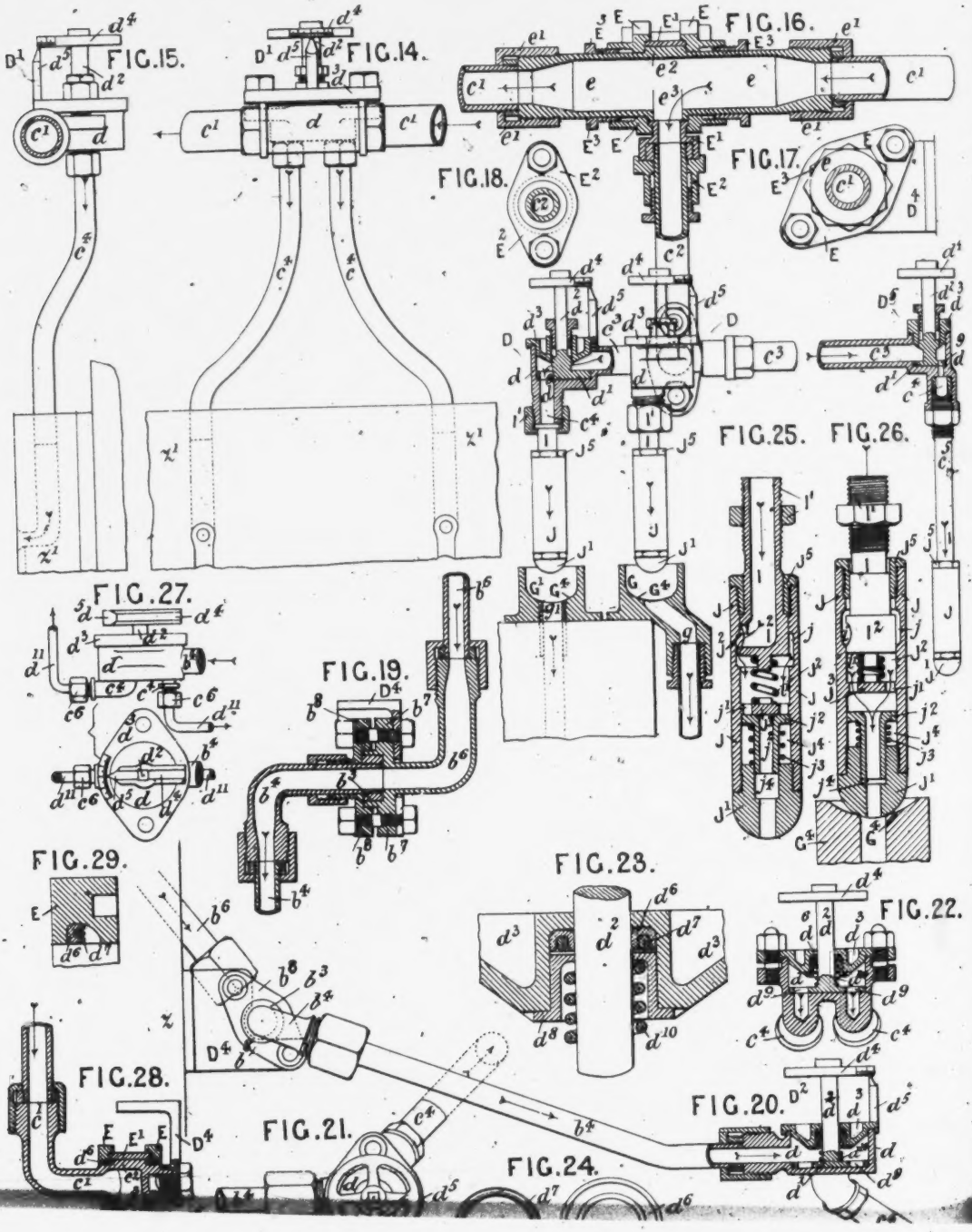
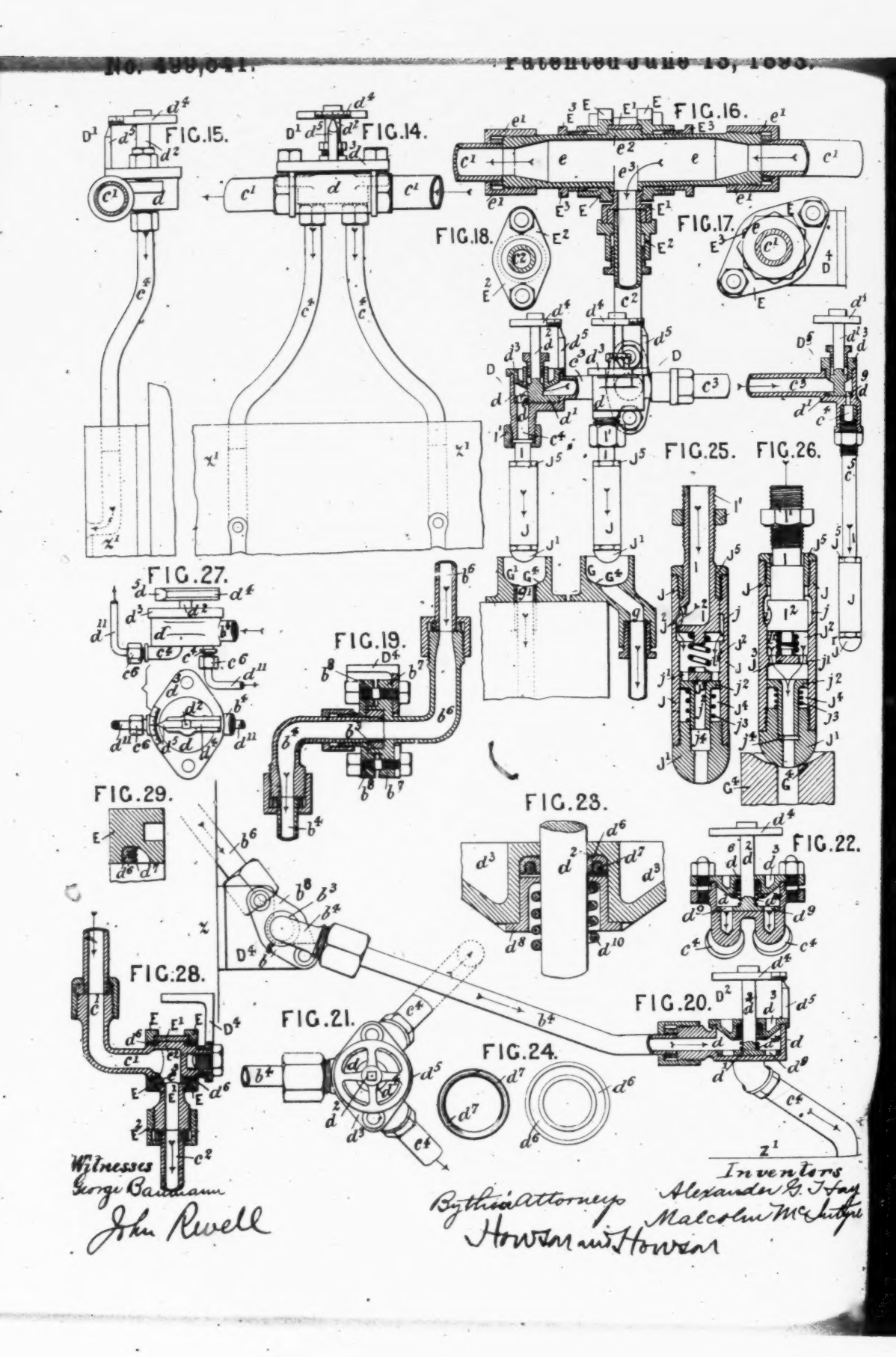
LUBRICATOR.

No. 499,541. Patented June 13, 1893.





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UNITED STATES PATENT OFFICE.

ALEXANDER G. HAY AND MALCOLM McINTYRE, OF GLASGOW, SCOTLAND.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 499,541, dated June 13, 1893.

Application filed January 13, 1891. Serial No. 377,585. (No model.) Patented in England October 2, 1890, No. 15,616.

To all whom it may concern:

Be it known that we, ALEXANDER GEBBIE HAY and MALCOLM MCINTYRE, engineers, subjects of the Queen of Great Britain and Ireland, residing in Glasgow, in the county of Lanark, Scotland, have invented Improved Mechanism for Lubricating the Working Parts of Engines and other Machinery, (for which we have obtained Letters Patent in Great Britain, No. 15,616, dated October 2, 1890,) of which the following is a specification.

Our invention has reference to appliances particularly adapted for automatically lubricating the cylinders, bearings and other working parts of marine engines, but also applicable for lubricating the working parts of other engines and machinery.

The improvements consist in automatically pumping or raising or forcing the lubricant through distributing pipes and fittings in a positive regulated manner in contradistinction to conveying the oil or other lubricants by combined gravitation and capillary wicks and dippers to the separate oil boxes and bearings as heretofore; and also in special improved constructions of the pumps and other fittings applicable for this improved system of lubricating.

In the accompanying drawings, Figure 1 is an end elevation; and Fig. 2 a corresponding side elevation of sufficient of the framing of an inverted cylinder marine steam engine and the main working parts and bearings to show one general arrangement of our new system and improved fittings as applied thereto for lubricating. Figs. 3 and 4 show a detailed sectional elevation and plan respectively of the supply and service piston cistern A; and Fig. 5 is a view of the filler and cock A^{10}. Figs. 6 and 7 show a detached side sectional matic oil serving syringe dipper. Figs. 27, 28 and 29 are detail views.

The cistern A is preferably secured and fitted by flanged brackets at A′, to the top of the cylinder X, as shown in Figs. 1 and 2; or it might be to any other high fixed part of the engine, or to the bulkhead above the working parts to be lubricated. This cistern raises the oil to itself and presses it therefrom through the first main pipe *a* coupled to its bottom branch at *a′*. As an alternative arrangement, an improved raising and forcing pump B shown in Figs. 6 and 7, and in corresponding section through the inlet and discharge valve box B^2, B^3, in Fig. 8, is fitted to some convenient part of the framing so as to be differentially reciprocated by the link B^7 and rod B^6 from any convenient moving part of the engine, the improved construction and action of which will be hereinafter referred to in reference to these figures.

The improvements further consist in a distributing service filter branch box C, and swiveling couplings *e* E′, and improved service disk valves *d d′* and automatic acting oil serving syringe dippers J. The pipes and fittings may be led down and along either the front or back frames or columns *z* of the engine.

The service piston barrel cistern A, shown in Figs. 1 to 5, consists of a bored cylindrical vessel A, with a working liquid-tight piston A^{13} which may be fitted with cup liquid tight leather rings or other equivalent. This piston is secured to a piston rod A^2 working up through the cylinder cover and guide bracket A″ A^5. A weight A^4 at the upper part of the piston rod A^2 tends to push the piston down and press out the oil from the vessel when

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The cistern A is preferably secured and fitted by flanged brackets at A', to the top of the cylinder X, as shown in Figs. 1 and 2; or it might be to any other high fixed part of the engine, or to the bulkhead above the working parts to be lubricated. This cistern raises the oil to itself and presses it therefrom through the first main pipe a coupled to its bottom branch at a'. As an alternative arrangement, an improved raising and forcing pump B shown in Figs. 6 and 7, and in corresponding section through the inlet and discharge valve box B^2, B^3, in Fig. 8, is fitted to some convenient part of the framing so as to be differentially reciprocated by the link B^7 and rod B^6 from any convenient moving part of the engine, the improved construction and action of which will be hereinafter referred to in reference to these figures.

The improvements further consist in a distributing service filter branch box C, and swiveling couplings e E', and improved service disk valves $d\,d'$ and automatic acting oil serving syringe dippers J. The pipes and fittings may be led down and along either the front or back frames or columns z of the engine.

The service piston barrel cistern A, shown in Figs. 1 to 5, consists of a bored cylindrical vessel A, with a working liquid-tight piston A^{13} which may be fitted with cup liquid tight leather rings or other equivalent. This piston is secured to a piston rod A^2 working up through the cylinder cover and guide bracket A'' A^3. A weight A^4 at the upper part of the piston rod A^2 tends to push the piston down and press out the oil from the vessel when filled and set in automatic working order. The lubricant is led in, and discharged through, the branch a' at the lower part of the vessel A, under the piston A^{13}. The piston is raised, to draw up oil to fill the vessel, by means of a toothed rack cut on the one side of the piston rod A^2, and a spur pinion A^5 gearing therewith, and carried on a hand spindle A^6 turning and sliding in bearings in the bracket A^3. This pinion A^5 is actuated by a worm on the spindle A^7 carried in bearings A^{11} A^{12}, on the said bracket A^3. The spindle A^7 is actuated by a hand crank wheel

A^8 on one end. The pinion A^5 is held in gear with the rack A^2 and actuating screw A^7 by a pin A^9 on the bracket A^3, taking into one of the grooves in the spindle A^6, see Fig. 4. When the cylinder A is filled and set to be discharged by the pressure of the piston A^{13}, and weight A^4, the pinion A^5 is pushed out of gear with the rack A^2. This is done by moving the spindle A^6 longitudinally in its bearings. It is held in this latter position by the pin A^9 entering another groove in the spindle A^6, which allows the piston rod A^2 and piston A^{13} to force the oil down through the discharge pipe a', a, to the improved service pipes, chambers, valves and fittings as hereinafter described.

Instead of the cistern A the pump B B′ may be employed. This pump is preferably of an improved single acting plunger form, arranged to work either vertically or horizontally from any suitable moving part of the engine. In the vertical arrangement of this pump shown in Figs. 6 to 8, the plunger B′ is a spindle of a small size as from half an inch to an inch, this maximum being large enough for most cases. The bored cylinder or pump B is fitted with a deep gland stuffing box B″ to guide the piston rod B′, the inner end of which is made to fit and work fluid tight in the cylinder. The valve box B^2 and the inlet and discharge branches B^4, B^5 are at one side of and cast in one with, the cylinder B with a bracket flange B^{14}, on one side for bolting the whole to any part of the engine or machinery framing. The inlet and discharge branches B^4 and B^5 are both provided with regulating cocks as seen in Fig. 8. The outer end of the plunger rod B′ is formed with a joint eye to be connected to and reciprocated by the free end of a connecting rod B^6 from any moving part of the engine. The other end of the rod B^6 is connected to the part B^9 which embraces, and is adapted to be shifted upon, a quadrant or segmental link B^7.

Figs. 9 and 10 are respectively front and cross sectional views of this part of the mechanism. The rod B^9 is adjustably connected to the quadrant B^7 by means of a spring pin B^8, entering one of the several holes in the quadrant so that the stroke of the pump may be varied to approximately draw and deliver any regulated quantity of the oil from any ordinary supply cistern placed either above or below the apparatus. When the plunger B′ is on its outward stroke the oil is drawn fitted in it an annular outlet valve chamber with a screw plug B^{13} in its upper end, to regulate the lift of the discharge valve B^3. This annular discharge valve plug B^{13} has an annular discharge chamber round it, with lateral recesses leading direct into the discharge branch B^5. A helical spring in the valve chest B^2 prevents the inlet valve opening too high. This arrangement of pump B may also be fitted to work horizontally, but in this case, the inlet and discharge valve boxes would be set at right angles to the cylinder B, that is, for the valves to work vertically. When the oil is supplied from a cistern above to the oil piston cylinder A, hereinbefore described, a filler and cock A^{10} (shown in Fig. 5), might be employed to fill the cylinder A, below the piston A^{13}.

In the arrangement shown in Figs. 1 and 2, the service cylinder A draws its oil before described through the pipe a^2 to the pipe a from one of the hollow columns z of the engine frame. In this case the column z is made an oil vessel fitted with a stop cock at a^4, the oil passing through a three-way cock a^3 shown in Fig. 11. This cock is attached by its lateral branch a^5 to a service filtering chest C, shown in Figs. 12 and 13. When the cock is turned at right angles it shuts off the connection between the pipe a and the pipe a^2 and opens that between the pipe a and the distributing service filter box C to supply the oil to the several service pipes c, b, b'. This vessel is provided with a perforated partition C′ and is fitted with a removable screw cover C^2 for cleaning, as seen particularly in Fig. 13. The several service pipes c, b, b' lead to the new or improved lubricating fittings of the different moving and working parts of the engine as will hereinafter be described. The pipe c conducts the oil to the fixed horizontal common service pipe c' secured over the top of the column z. This pipe leads the oil to the cocks d d', shown at D′, in Figs. 1, 2, 14 and 15, which regulate and supply the oil to the working surfaces of the guides z' on the column frames and the slides z^2 of the cross head z^3. The pipe b from the service filter box C supplies the opposite slides and guides z', z^2. Each chest d is fitted with one or more branches c^4 to lead the oil to different points. The boxes d have a disk valve d' shown in Figs. 16, 20 and 22 with holes d^2 corresponding in size and number to the branches c^4, Figs. 16 and 20 to 24 inclusive. The di[illegible] d' is actuated by a spindle d^3 and

and weight A^5, the pinion A^6 is pushed out of gear with the rack A^7. This is done by moving the spindle A^6 longitudinally in its bearings. It is held in this latter position by the pin A^9 entering another groove in the spindle A^6, which allows the piston rod A^2 and piston A^{13} to force the oil down through the discharge pipe a', a, to the improved service pipes, chambers, valves and fittings as hereinafter described.

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Figs. 9 and 10 are respectively front and cross sectional views of this part of the mechanism. The rod B^6 is adjustably connected to the quadrant B^7 by means of a spring pin B^8, entering one of the several holes in the quadrant so that the stroke of the pump may be varied to approximately draw and deliver any regulated quantity of the oil from any ordinary supply cistern placed either above or below the apparatus. When the plunger B′ is on its outward stroke the oil is drawn through the inlet branch B^4 and valve B^{12}, into the inlet valve chest B^3, then through a branch B^{10}, which connects the valve chest to the lower end of the cylinder B. When the plunger B′ is on its inward stroke it forces the oil out through the same valve chamber B^3 and up through a discharge valve B^3, fitted above the inlet valve B^{12} in the same chamber, and out through the discharge branch B^5, as indicated by the arrows in Fig. 8 to the service pipe a. The upper end of the valve box B^3 is bored and chased, so as to have branch B^5. A helical spring in the chest B^3 prevents the inlet valve opening too high. This arrangement of pump B may also be fitted to work horizontally, but in this case, the inlet and discharge valve boxes would be set at right angles to the cylinder B, that is, for the valves to work vertically. When the oil is supplied from a cistern above to the oil piston cylinder A, hereinbefore described, a filler and cock A^{10} (shown in Fig. 5), might be employed to fill the cylinder A, below the piston A^{13}.

In the arrangement shown in Figs. 1 and 2, the service cylinder A draws its oil before described through the pipe a^2 to the pipe a from one of the hollow columns z of the engine frame. In this case the column z is made an oil vessel fitted with a stop cock at a^4, the oil passing through a three-way cock a^3 shown in Fig. 11. This cock is attached by its lateral branch a^5 to a service filtering chest C, shown in Figs. 12 and 13. When the cock is turned at right angles it shuts off the connection between the pipe a and the pipe a^2 and opens that between the pipe a and the distributing service filter box C to supply the oil to the several service pipes c, b, b'. This vessel is provided with a perforated partition C′ and is fitted with a removable screw cover C^3 for cleaning, as seen particularly in Fig. 13. The several service pipes c, b, b' lead to the new or improved lubricating fittings of the different moving and working parts of the engine as will hereinafter be described. The pipe c conducts the oil to the fixed horizontal common service pipe c' secured over the top of the column z. This pipe leads the oil to the cocks d d', shown at D′, in Figs. 1, 2, 14 and 15, which regulate and supply the oil to the working surfaces of the guides z' on the column frames and the slides z^2 of the cross head z^3. The pipe b from the service filter box C supplies the opposite slides and guides z', z^2. Each chest d is fitted with one or more branches c^4 to lead the oil to different points. The boxes d have a disk valve d' shown in Figs. 16, 20 and 22 with holes d^9 corresponding in size and number to the branches c^4, Figs. 16 and 20 to 24 inclusive. The disk valve d' is actuated by a spindle d^2 and works on a turned face in the bottom of the chest d, over the branches c^4. The spindle d^2 passes out through a liquid-tight cover d^3 fitted with a cup leather d^5 and expanding split metal ring d^7 and bush d^8 with helical spring at d^6 as shown in the sectional views Figs. 20 to 23. This arrangement of the cover dispenses with stuffing box packing on the spindle d^2, the cup ring d^5 being expanded to grip the rod and the recess in the cover of the joint by the spring ring d^7. The spindle d^2 is turned

by a hand wheel d^4 which is provided with divisions, and a fixed index pointer d^5 projecting up from the cover d^3 shows the position of the disk valve d'. Thus the supply of oil to the service branches c^4 may be regulated. The common supply tube c' also supplies oil through two of the double swiveling or T-branches e E′ fitted thereon, as shown in enlarged sectional view in Fig. 16. From the branches e E′, the oil passes by the tubes c^2 c^3 to the intermittent automatic syringe dippers J (Figs. 25 and 26) carried on these swiveling branches and tubes, over the oil cups at G, G′, G². By means of the swiveling joints e, E′, these dippers J can be adjusted. From the oil cups G G′ the oil is led by the tubes g from the cups G to the crank or crank pin at the lower end of the connecting rod at Z^2 by the tubes g' to the upper journals at G′ of the cross-head z^3, and by the tubes g^2 to the outer journals at G² of the cross-head, see Fig. 2.

Referring to Figs. 1 and 2, and 16 to 18 the swiveling T-branch e, E′ consists of a central branch pipe e secured by turned and screwed couplings e' at its outer ends to the ends of the service pipe c' and in line therewith. The pipe e has a turned boss e^2, in the center where the lateral branch e^3 is formed, and fitted over this turned boss is the hollow branch E′. This branch is embraced liquid-tight by the flanged bosses E E, of two stuffing boxes E^3 mounted on the boss e^2 of the branch e e. These stuffing boxes are bolted together by bolts as shown in the end view Fig. 17. Thus the branch pipes E′ and c^2 can swivel at right angles, liquid-tight on the central boss e^2 of the branch e, so as to raise the branch pipes c^2 and automatic lubricators J out of the way of their oil cups G, G′. By these means the covers of the bearings or working parts can be got at without disturbing the main service pipes c'.

A swiveling joint is made at E′ by fitting on the end of the branch pipe c^2 a stuffing gland E^2 with flanges to be bolted to the branch E′, shown in end view in Fig. 18. This enables the branch pipe c^2, with the automatic lubricators J and the branch pipe c^3 to be swiveled at right angles to the former joint e, E′, to take these lubricators laterally away from their receiving oil cups G, G′, G², as shown turned out in this position at x on the left hand side of Fig. 2.

Each bearing to be lubricated and its oil cup G has its service pipe and branch c^4 fitted with a regulating valve case d as indi-

Fig. 19 shows a sectional elevation detached of one of these swiveling joints b^3 to a large scale, formed of two glands b^7, b^8 screwed together to form an internal swivel joint b^3. The bracket D^4 is for securing the joint to a fixed part of the engine.

A further improvement of our system consists of an automatic oil dipper J shown in sectional elevation with the moving parts in their normal and discharging positions respectively in Figs. 25 and 26. These dippers J are attached by screw stems I, I′ with jam nuts, to the lower ends of the oil serving tubes c^4, c^5 leading to the reciprocating parts of the engine. Such reciprocating parts of the engine are provided with an oil cup or a concave part G^4, which, as the part rises, presses against the lower nozzle end J′ of the syringe. This syringe is formed of a hollow cylinder J, bored at its upper end J^2 to fit a hollow piston I^2 formed on the lower inner end of the screw tube I, which is passed in through a screw stuffing cover J^5. A lateral orifice i in the center of the piston part I^2 opens into an annular wide part j in the bored cylinder J^2. A perforated division J^3 is formed in the center of the hollow cylinder J, with a strong helical spring i' fitted between it and the lower end of the piston I^2, so as to press this division J^3 and the cylinder J down from the piston I^2 until the cover J^5 stops against the upper end of the piston I^2, as shown in Fig. 25. In this position the oil passes from the tube I into the lower bored part J^2 of the cylinder J as indicated by the arrows in this figure. The hollow stem of the disk valve j^2 has a light helical spring j^3 fitted over it, resting on the lower screw plug J′ in a bored part j^4 of which the lower stem of the valve j^2 works. This spring pressing the disk j^2 against the division J^3 closes the perforations j' when the cylinder J is pressed down by the spring i', as shown in Fig. 25. But when a lubricating cup comes up and strikes the lower end J′ of this lubricating cylinder J, as shown at G^4 in Fig. 26, the spring i' is compressed and the oil is forced out of the chamber J^2 through the perforations j' and out through the hollow stem of the valve j^2, and lower end J′ of the syringe, the pressure of the oil acting on the valve j^2 opening it by compressing the light spring j^3 as shown and indicated by the arrows in Fig. 26.

Fig. 27 shows an elevation and plan of one of the disk valve boxes d, more particularly described in reference to and shown in Figs. 14 to 18 and 20 and 21. This Fig. 27 shows

the intermittent automatic syringe dippers J (Figs. 25 and 26) carried on these swiveling branches and tubes, over the oil cups at G, G', G². By means of the swiveling joints *e*, E', these dippers J can be adjusted. From the oil cups G G' the oil is led by the tubes *g* from the cups G to the crank or crank pin at the lower end of the connecting rod at Z² by the tubes *g'* to the upper journals at G' of the cross-head z^3, and by the tubes g^2 to the outer journals at G² of the cross-head, see Fig. 2.

Referring to Figs. 1 and 2, and 16 to 18 the swiveling T-branch *e*, E' consists of a central branch pipe *e* secured by turned and screwed couplings *e'* at its outer ends to the ends of the service pipe *c'* and in line therewith. The pipe *e* has a turned boss e^2, in the center where the lateral branch e^3 is formed, and fitted over this turned boss is the hollow branch E'. This branch is embraced liquid-tight by the flanged bosses E E, of two stuffing boxes E^3 mounted on the boss e^2 of the branch *e e*. These stuffing boxes are bolted together by bolts as shown in the end view Fig. 17. Thus the branch pipes E' and c^2 can swivel at right angles, liquid-tight on the central boss e^2 of the branch *e*, so as to raise the branch pipes c^2 and automatic lubricators J out of the way of their oil cups G, G'. By these means the covers of the bearings or working parts can be got at without disturbing the main service pipes *c'*.

A swiveling joint is made at E' by fitting on the end of the branch pipe c^2 a stuffing gland E^2 with flanges to be bolted to the branch E', shown in end view in Fig. 18. This enables the branch pipe c^2, with the automatic lubricators J and the branch pipe c^3 to be swiveled at right angles to the former joint *e*, E', to take these lubricators laterally away from their receiving oil cups G, G', G², as shown turned out in this position at *x* on the left hand side of Fig. 2.

Each bearing to be lubricated and its oil cup G has its service pipe and branch c^4 fitted with a regulating valve case *d* as indicated at D. A separate branch c^3 is led from the branch c^2 with a regulating valve at D^5 to carry the service tube c^5 and lubricator J, to deliver the oil into the receiving cup G^2 of the outer ends of the cross-heads z^3 as shown on the right of Figs. 2 and 16. The pipe *b'* leading from the chest C (Fig. 2) is connected to the cross pipe b^2 by a swiveling T coupling as at b^5, and angle branches are connected to the pipe b^2 by single swiveling joints as at b^3.

spectively in Figs. 25 and 26. These dippers J are attached by screw stems I, I' with jam nuts, to the lower ends of the oil serving tubes c^4, c^5 leading to the reciprocating parts of the engine. Such reciprocating parts of the engine are provided with an oil cup or a concave part G^4, which, as the part rises, presses against the lower nozzle end J' of the syringe. This syringe is formed of a hollow cylinder J, bored at its upper end J^2 to fit a hollow piston I^2 formed on the lower inner end of the screw tube I, which is passed in through a screw stuffing cover J^5. A lateral orifice *i* in the center of the piston part I^2 opens into an annular wide part *j* in the bored cylinder J^2. A perforated division J^3 is formed in the center of the hollow cylinder J, with a strong helical spring *i'* fitted between it and the lower end of the piston I^2, so as to press this division J^3 and the cylinder J down from the piston I^2 until the cover J^5 stops against the upper end of the piston I^2, as shown in Fig. 25. In this position the oil passes from the tube I into the lower bored part J^2 of the cylinder J as indicated by the arrows in this figure. The hollow stem of the disk valve j^2 has a light helical spring j^3 fitted over it, resting on the lower screw plug J' in a bored part j^4 of which the lower stem of the valve j^2 works. This spring pressing the disk j^2 against the division J^3 closes the perforations *j'* when the cylinder J is pressed down by the spring *i'*, as shown in Fig 25. But when a lubricating cup comes up and strikes the lower end J' of this lubricating cylinder J, as shown at G^4 in Fig. 26, the spring *i'* is compressed and the oil is forced out of the chamber J^2 through the perforations *j'* and out through the hollow stem of the valve j^2, and lower end J' of the syringe, the pressure of the oil acting on the valve j^2 opening it by compressing the light spring j^3 as shown and indicated by the arrows in Fig. 26.

Fig. 27 shows an elevation and plan of one of the disk valve boxes *d*, more particularly described in reference to and shown in Figs. 14 to 18 and 20 and 21. This Fig. 27 shows the outlet branches c^4 leading to the feed pipes d^{11} from the boxes *d*. The swivel jointed couplings c^6 allow these feed branches d^{11} to swivel either vertically or horizontally to or out of the way of the bearings to be lubricated. Fig. 27 also shows a pointer d^5 on the cross handle d^4 on the top of the spindle d^2 of the valve, instead of a stile pointer d^3 as described in reference to the former figures. This pointer is fitted nearly close down to the cover d^3

of the valve chest d, so that the divided index is cut on the corner opposite the cross hand pointer d^5 instead of on the hand-wheel d^4 of the former arrangements opposite the stile pointer d^5.

Fig. 28 shows a sectional elevation of a single swiveling joint e^1, E′, for fitting on the ends of the oil service pipes c' (where the tube c^2 leading to the bearings to be lubricated has to be raised out of the way, when the bearings have to be tightened up), equivalent to, and as a substitute for, the swiveling tube joint shown in Figs. 16 and 19. In this arrangement the fixed central hollow boss e^2 on the end of the tube c' has a small hole e^3 in it, leading to the service tube c^2, so that the oscillating eye E′ on this boss to which the service tube c^2 is coupled at E^2, in being lifted or turned up, shuts off the passage e^3 of the oil to the service tube c^2 and prevents leakage or waste. The fixed boss e^2 has a solid end projecting through one of its gripping flanges E to which the bracket D^4 is screwed for securing the supply pipe c' and boss e^2 to the columns x or any fixed part of the framing; otherwise it is constructed substantially as shown in the said other Figs. 16 and 19. But to insure tightness of the swiveling flanges E E, of these couplings, their inner eyes where they swivel on the boss e^2 and tubes are shown as formed with grooves for the insertion of small cup leather rings d^8 and internal spring metal rings d^7 for making these working parts E on these tubes liquid tight, the same as the rings shown in Figs. 23 and 24 to a larger scale. And these cup leather rings d^8 may be applied to the swiveling joint flanges E of any of these couplings as indicated to a large scale in section in Fig. 29.

We claim as our invention—

1. In a system for automatically lubricating the working parts of machinery, the combination of a weighted service cistern distributing filter boxes connected therewith, with feed and oscillating service pipes leading from the filter boxes and having swiveling joints and intermittent feed syringe dippers operated by the oil box of the part to be lubricated and shutting off and regulating valves, all substantially as described.

2. In a system for automatically lubricating the working parts of machinery, the combination of a supply cistern, distributing filter boxes connected therewith, with feed pipes leading from the filter boxes and provided with valves d d' having spindles and indicating fittings, the said feed pipes being also provided with swivel jointed pipes, shutting off cocks and devices operated by the moving parts of the engine for feeding the oil thereto, all substantially as set forth.

3. In a system for automatically lubricating the working parts of machinery, the combination of an oil service cistern, filter box connected with the cistern and main service pipes leading from the filter box, with local service pipes, and single and double swiveling joint couplings between the main and the local service pipes, substantially as set forth.

4. In a system for automatically lubricating the crank pins, cross-heads, lever links, and other like moving parts of engines, and other machinery, the combination of an oil service cistern, filter box connected therewith and main service pipes leading from the filter box, with local service pipes, each provided with automatic feed oil forcing syringe dipper having a moving oil box adapted to be operated by the moving oil box of the part to be lubricated, substantially as set forth.

5. In a system for automatically lubricating the crank pins, cross-heads, lever links, and other like moving parts of engines and other machinery, the combination of an oil service cistern, filter box connected therewith and main service pipes leading from the filter box, with local service pipes each provided with moving syringe cylinder J the said cylinder being provided with a perforated division J^5, a hollow piston I^3, lateral orifice i, helical springs i' i^3 and disk valves i^2, substantially as and for the purposes set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

ALEXANDER G. HAY.
MALCOLM McINTYRE.

Witnesses:
W. R. M. THOMSON,
JOHN SIME,
Both of 96 *Buchanan Street, Glasgow.*

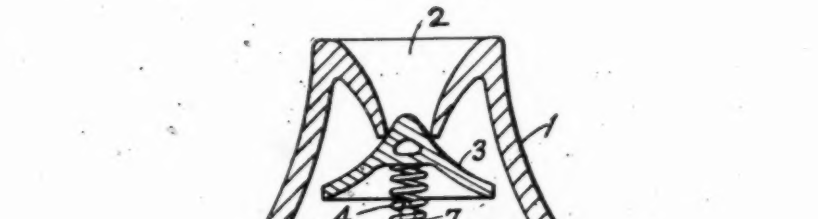
498

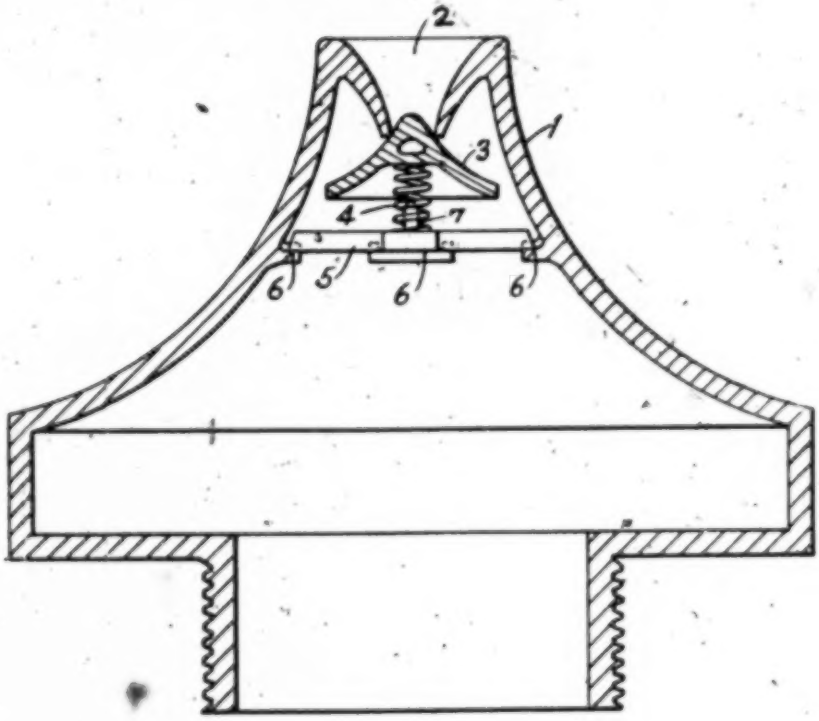
A. J. CROTTY.

OIL CAP FOR VEHICLE WHEELS.

APPLICATION FILED SEPT. 5, 1917.

1,400,871. Patented Dec. 20, 1921.





INVENTOR
Andrew Joseph Crotty
BY
Sewell & Son
HIS ATTORNEYS

UNITED STATES PATENT OFFICE.

ANDREW JOSEPH CROTTY, OF KNOCKLONG, IRELAND.

OIL-CAP FOR VEHICLE-WHEELS.

1,400,871. Specification of Letters Patent. Patented Dec. 20, 1921.

Application filed September 5, 1917. Serial No. 189,865.

(GRANTED UNDER THE PROVISIONS OF THE ACT OF MARCH 3, 1921, 41 STAT. L., 1313.)

To all whom it may concern:

Be it known that I, ANDREW JOSEPH CROTTY, a subject of the King of Great Britain, residing at Ballylanders, Knocklong, county Limerick, Ireland, have invented certain new and useful Improvements in Oil-Caps for Vehicle-Wheels, of which the following is a specification.

To simplify the oiling of vehicle wheels I propose to transform the present existing cap into a cone with an inverted lip or flange inclining inward at the apex of this cone in which shall be an opening which shall have fitted into it a sliding valve which shall be a smaller cone, hollow internally without an opening at the apex and which shall be kept in position by a spiral coil or spring fitting into the hollow of this smaller cone and which coil or spring shall be itself kept in position by a piece of metal in the form of a cross the ends of which shall fit into four grooves, one opposite the other in the inner side of the outer cone. This cross-piece shall also have a short pivot in the center which pivot shall fit into the lower end of the spiral coil, and this cross-piece shall be detachable.

As shown in the accompanying drawing, said oil-cap consists of an outer cone 1 with an opening at the apex 2, as shown into which fits the inner cone 3 which latter is held in place and operated by the spiral coil or spring 4 which latter is in turn held in place by the cross-piece 5 fitting into grooves at 6 in lugs in the inner side of the outer cone 1, as shown. The pivot 7 fits into the center of the spiral coil or spring 4, as shown, thus securing said spring in position.

This cap can be oiled by means of an oil can introduced into the opening at the apex and by pressing on the inner cone which retracts and allows the oil to flow into the base of the cap, the conical shape of which accelerates this without removing the cap or changing the position of the wheel so that in this case time and oil are saved, for in the prior art when the cap is removed from the wheel and oil poured into the former, a certain amount of this oil is lost in the operation of replacing the cap.

Having described my invention, what I claim is:—

1. In an oil cap having a conical casing with an internal flange at the apex thereof, a valve comprising a conical body member having a recess in the base thereof, a cross piece secured in position in the conical casing, and a spring extending between the cross piece and the conical valve, with one end thereof entering the recess in the base of the conical valve to normally maintain the same in position against the valve seat formed at the extremity of the internal flange at the apex of the said conical casing.

2. In an oil cap having a conical casing with an internal flange at the apex thereof and spaced internal lugs on the walls thereof, a valve comprising a conical body member having a recess in the base thereof, a cross member seated on the internal lugs of the walls of the casing, a pin secured in the cross piece, and a spring extending between the said cross piece and the said valve member, one end of the spring surrounding the said pin and the other pin entering the said recess in the base of the valve member to center the said spring and normally maintain the valve member in position against the valve seat formed at the extremity of the said internal flange at the apex of the casing.

Signed by me this 15th day of June, 1917.

ANDREW JOSEPH CROTTY.

Witnesses:
GEO. B. DAWSON,
PATRICIA CAMPBELL.

500

June 19, 1923. 1,459,662

C. W. MANZEL

LUBRICATING SYSTEM.

Filed Aug. 18, 1920. 2 Sheets-Sheet 1

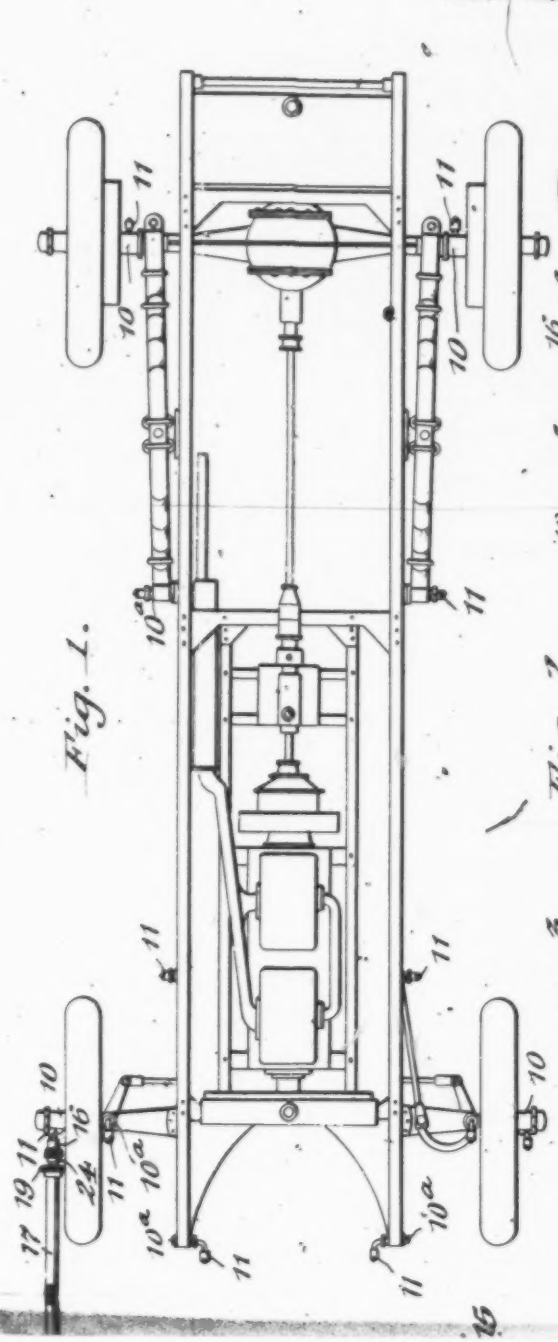


Fig. 1.

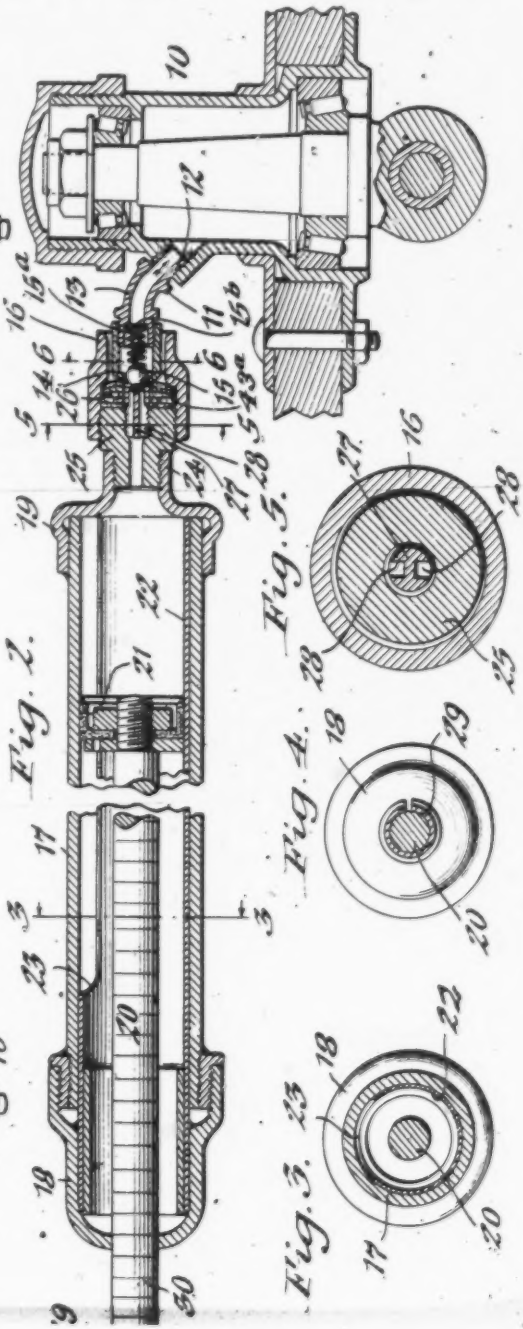


Fig. 2.

Fig. 5.

Fig. 4.

Fig. 3.

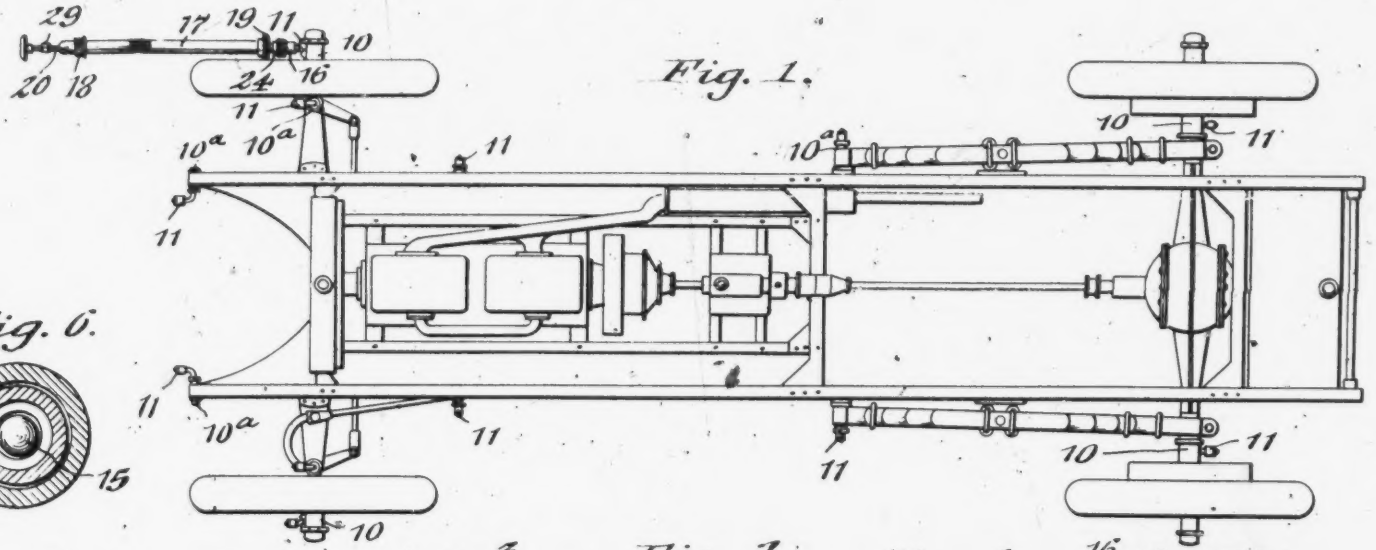
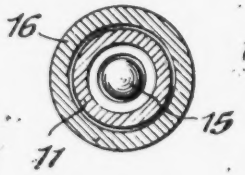


Fig. 1.

Fig. 6.



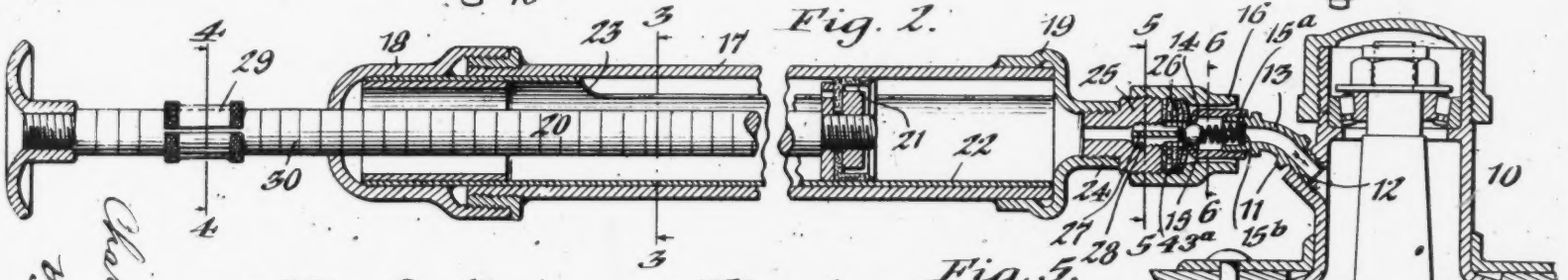


Fig. 2.

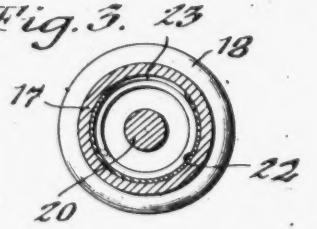


Fig. 3.

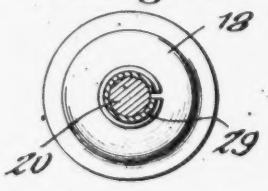


Fig. 4.

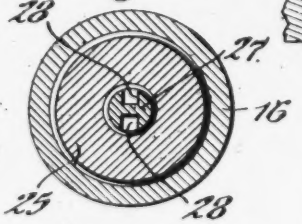


Fig. 5.

Inventor:
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By Edgar Gleim
Attorneys.

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June 19, 1923. 1,459,662

C. W. MANZEL

LUBRICATING SYSTEM

Filed Aug. 18, 1920 2 Sheets-Sheet 2

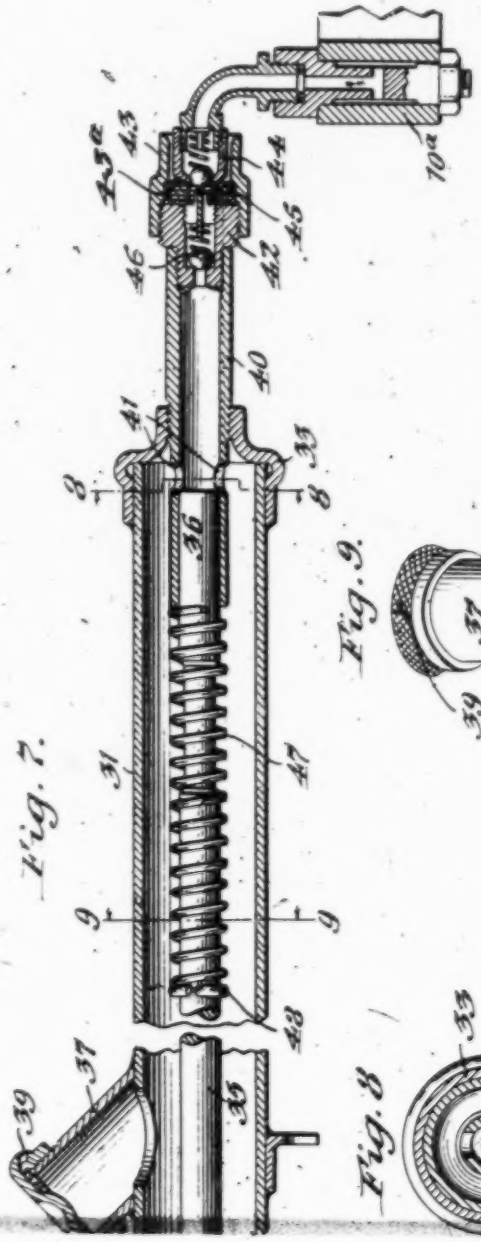


Fig. 7.

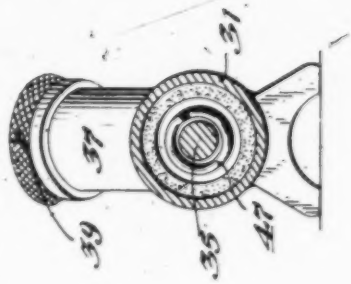


Fig. 9.

Fig. 8.

Fig. 7.

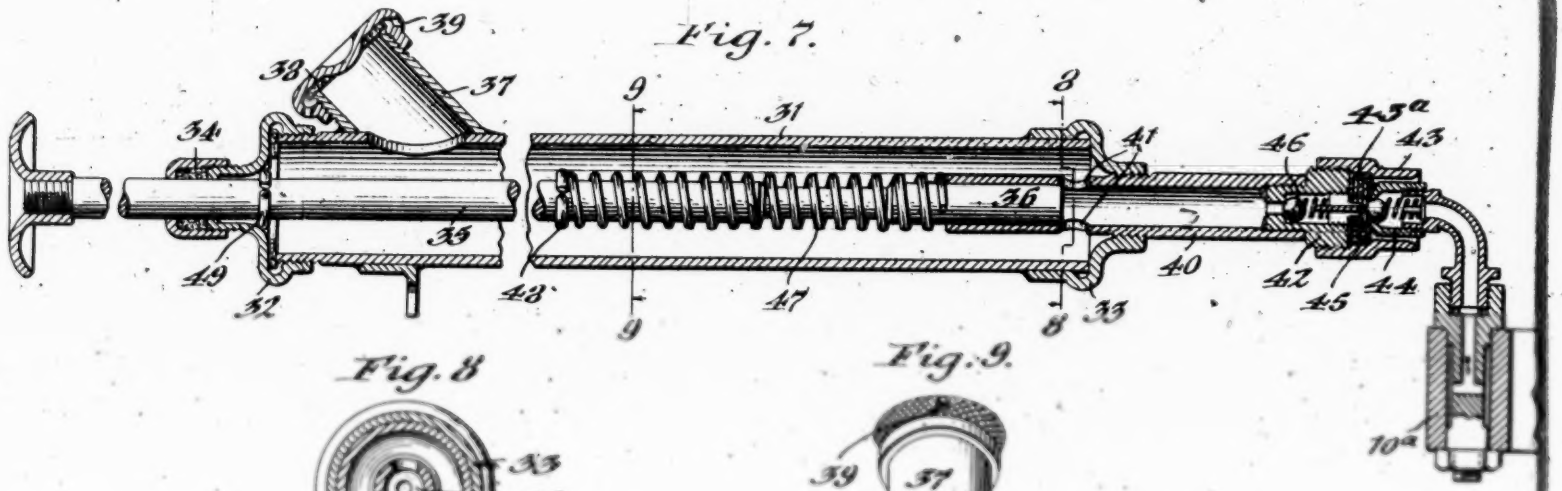


Fig. 8

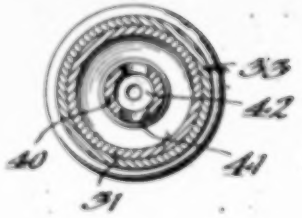
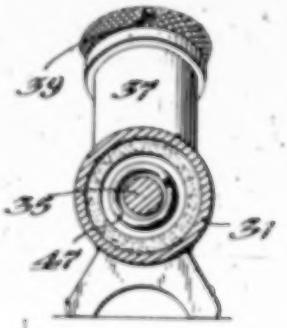


Fig. 9.



Inventor;
Charles H. Mangel,
by Lysen & Thompson
Attorneys.

Patented June 19, 1923. 1,459,662

UNITED STATES PATENT OFFICE.

CHARLES W. MANZEL, OF BUFFALO, NEW YORK, ASSIGNOR TO THE BASSICK MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF DELAWARE.

LUBRICATING SYSTEM.

Application filed August 18, 1920. Serial No. 404,300.

To all whom it may concern:

Be it known that I, CHARLES W. MANZEL, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Lubricating Systems, of which the following is a specification.

This invention relates to a lubricating system designed more particularly for supplying the various bearings of automobiles, motor-trucks, tractors and similar vehicles.

One of its objects is the provision of a lubricating system or apparatus by which oil or grease of any desired consistency can be fed to the parts requiring lubrication, under sufficient pressure to expel any remaining old oil or grease through the bearing joints and force in fresh lubricant, in order to insure thorough and positive lubrication of every bearing.

A further object is to permit quick and convenient lubrication of parts which are remote and ordinarily difficult of access, without the necessity of handling or touching them or going underneath the car, thus avoiding soiling of the hands and clothing.

It is recognized that grease is most efficient for ball and roller bearings, and oil for solid or ordinary bearings having no such anti-friction members; and my improved system contemplates the use of separate force pumps or guns for supplying the two kinds of lubricant, but a single combination gun capable of delivering either oiler or grease may be employed, if desired.

In the accompanying drawings: Figure 1 is a top plan view of an automobile equipped with the improved lubricating system, the body of the car being omitted. Figure 2 is a longitudinal section, on an enlarged scale, of a gun or force pump suitable for supplying the lubricant, and Figure 3 is a detail view of the nipple-neck.

Like numerals refer to like parts in all the figures.

Referring to Figure 1, the bearings of the motor car are replaced by feed-nipples 11, one of these bearings and its feed nipple being shown in vertical section in Fig. 2. This bearing is of the roller type and therefore lubricated with grease. It has the customary internally threaded connection 12 for receiving the feed nipple 11, which has a stem or neck 13 to which it is detachably connected by a screw threaded joint, as shown, or by other suitable means. This neck may be straight or curved, according to the location of the bearing, to render the nipple most accessible to the discharge nozzle of the oil or grease gun, as hereinafter more fully described. But in its preferred construction, this neck or stem 13 is flexible, so that it can be bent into any desired position or at the most convenient angle to facilitate access to it by the lubricant gun. For this purpose the nipple-neck may be constructed of a suitable flexible material, as annealed steel, which is flexible enough to permit such bending and yet stiff enough to remain in position and retain its form under the pressure ordinarily exerted against the nipple by the gun in lubricating the bearing. The nipple is thus universally adjustable, doing away with the necessity of furnishing straight nipples and a variety of elbow nipples of several angles and simplifying and cheapening their manufacture accordingly.

Each of these nipples is provided with a central inlet-orifice 14 which is normally closed by an internal check-valve 15, preferably a spring-pressed valve of the ball type, to retain the lubricant in the bearing and exclude dust and water therefrom. A suitable stop is provided to prevent this valve from being forced back in the bearing nipple by the lubricant far enough to

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Be it known that I, CHARLES W. MANZEL, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Lubricating Systems, of which the following is a specification.

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It is recognized that grease is most efficient for ball and roller bearings, and oil for solid or ordinary bearings having no such anti-friction members; and my improved system contemplates the use of separate force pumps or guns for supplying the two kinds of lubricant, but a single combination gun capable of delivering either oiler or grease may be employed, if desired.

In the accompanying drawings: Figure 1 is a top plan view of an automobile equipped with the improved lubricating system, the body of the car being omitted. Figure 2 is a longitudinal section, on an enlarged scale, of a gun or force pump suitable for supplying grease to the bearings. Figures 3, 4, 5 and 6 are cross sections of said gun on the correspondingly numbered lines in Figure 2. Figure 7 is a longitudinal section of a gun or pump suitable for supplying oil to the bearings. Figures 8 and 9 are cross sections of this pump on the correspondingly-numbered lines in Fig. 7.

Similar characters of reference indicate corresponding parts throughout the several views.

Referring to Figs. 1–6, the old oil and grease cups of the various bearings 10, 10^a of the motor car are replaced by feed-nipples 11, one of these bearings and its feed nipple being shown in vertical section in Fig. 2. This bearing is of the roller type and therefore lubricated with grease. It has the customary internally threaded connection 12 for receiving the feed nipple 11, which has a stem or neck 13 to which it is detachably connected by a screw threaded joint, as shown, or by other suitable means. This neck may be straight or curved, according to the location of the bearing, to render the nipple most accessible to the discharge nozzle of the oil or grease gun, as hereinafter more fully described. But in its preferred construction, this neck or stem 13 is flexible, so that it can be bent into any desired position or at the most convenient angle to facilitate access to it by the lubricant gun. For this purpose the nipple-neck may be constructed of a suitable flexible material, as annealed steel, which is flexible enough to permit such bending and yet stiff enough to remain in position and retain its form under the pressure ordinarily exerted against the nipple by the gun in lubricating the bearing. The nipple is thus universally adjustable, doing away with the necessity of furnishing straight nipples and a variety of elbow nipples of several angles and simplifying and cheapening *their manufacture accordingly.*

Each of these nipples is provided with a central inlet-orifice 14 which is normally closed by an internal check-valve 15, preferably a spring-pressed valve of the ball type, to retain the lubricant in the bearing and exclude dust and water therefrom. A suitable stop is provided to prevent this valve from being forced back in the bearing nipple by the lubricant far enough to close its throat. The stop shown in the drawings consists of a fixed pin 15^a arranged axially in said neck and extending forwardly from a bridge piece 15^b extending across its throat. The spring of the check valve surrounds this pin.

For supplying grease to bearings having such feed nipples, a comparatively long and slender gun or force pump is employed having a sliding piston and a tubular guide or centering nozzle 16 at its front end which is adapted to slip over the feed nipple and which is rigidly connected to the pump-

body. This nozzle is controlled by and engaged with the nipple by the pump itself which serves as a long handle for this purpose, enabling remote bearings to be conveniently reached through any accessible space without the necessity of going or reaching under the car and soiling the hands and clothing. The preferred grease pump shown in the drawings comprises a long barrel 17 of relatively small diameter closed at its ends by caps or heads 18, 19, the rear one 18 being preferably a detachable screw cap through which passes the rod 20 of the pump piston or plunger 21. Arranged within the pump barrel and secured at its rear end to the screw cap 18 is a cylindrical, open-ended grease magazine or receptacle 22 extending practically throughout the length of the barrel and provided in its side with a filling slot or aperture 23 through which the magazine is filled with grease with a spoon or similar implement. To do this, the rear cap 18 is unscrewed from the pump barrel and the magazine is withdrawn therefrom. The plunger is then drawn back beyond the rear end of said filling aperture, and after filling the magazine, it is replaced and the cap is again secured in place.

Projecting centrally from the front head 19 of the pump-barrel is a hollow neck 24 with which engages the hollow stem of a discharge nipple 25. This nipple carries the guide-nozzle 16 of the pump which projects beyond said nipple, these parts being preferably united by screw threaded joints, as shown in Fig. 2. Housed within the guide nozzle and seated against the face of the pump nipple 25 is a packing washer or gasket 26 of rubber or other appropriate material, the bore of which registers with the bore of said nipple and which is adapted to seat against the head of any one of the feed-nipples 10. This packing preferably consists of a number of disks or laminations of oil proof material. The delivery end of the pump barrel and the receiving end of the bearing-nipple are provided with complementary means, whereby a sealed, lubricant-tight connection may be effected between said elements solely by the application of pressure lengthwise of the pump-area between these parts is thus avoided, and such contact is confined to an area less than that of the pump-piston, thereby insuring the necessary preponderance of the longitudinal pressure on the pump, exerted by the operator, over the resistance or back-pressure tending to break the seal or joint between the pump and the bearing nipple. A perfect and reliable seal is maintained between these parts as long as such longitudinal pressure continues, thus effectually preventing leakage and waste of the lubricant through said joint, even though the oil or grease is forced into tight-fitting bearings at a pressure, for example, of 3000 pounds or more to the square inch, and notwithstanding the absence of a positive connection or coupling device between the gun and the feed nipple. At the same time, the pump is quickly separable from said nipple by simply relieving the forward pressure on the pump and withdrawing its guide nozzle from the nipple, thus rendering it unnecessary to reach under the car to apply or remove said nozzle directly by hand.

When the face of the yielding packing gasket is made convex, the desired central bulge is obtained by tightly clamping its rim between the front end of the gun-nipple 42 and an internal shoulder 43ª of the guide nozzle 43, as shown in Figs. 2 and 7. The guide nozzle preferably has a flared mouth and is fitted somewhat loosely on the bearing nipple, and as the face of the latter is convex, the nozzle is free to rock or swivel thereon to a limited extent, facilitating the engagement of the nozzle therewith.

To prevent undue constriction of the gasket-bore by the bearing nipple under the forward pressure of the pump or its plunger, a fixed core or stem 27 carried by the discharge-nipple 25, extends through said bore, as shown in Fig. 2. The projecting front portion of this core is reduced and provided throughout its length with longitudinal grooves or channels 28 for the passage of the grease into the bearing nipple.

In lubricating a bearing with this grease gun, after filling the magazine 22 and

rel 17 of relatively small diameter closed at its ends by caps or heads 18, 19, the rear one 18 being preferably a detachable screw cap through which passes the rod 20 of the pump piston or plunger 21. Arranged within the pump barrel and secured at its rear end to the screw cap 18 is a cylindrical, open-ended grease magazine or receptacle 22 extending practically throughout the length of the barrel and provided in its side with a filling slot or aperture 23 through which the magazine is filled with grease with a spoon or similar implement. To do this, the rear cap 18 is unscrewed from the pump barrel and the magazine is withdrawn therefrom. The plunger is then drawn back beyond the rear end of said filling aperture, and after filling the magazine, it is replaced and the cap is again secured in place.

Projecting centrally from the front head 19 of the pump-barrel is a hollow neck 24 with which engages the hollow stem of a discharge nipple 25. This nipple carries the guide-nozzle 16 of the pump which projects beyond said nipple, these parts being preferably united by screw threaded joints, as shown in Fig. 2. Housed within the guide nozzle and seated against the face of the pump nipple 25 is a packing washer or gasket 26 of rubber or other appropriate material, the bore of which registers with the bore of said nipple and which is adapted to seat against the head of any one of the feed-nipples 10. This packing preferably consists of a number of disks or laminations of oil proof material. The delivery end of the pump barrel and the receiving end of the bearing-nipple are provided with complementary means, whereby a sealed, lubricant-tight connection may be effected between said elements solely by the application of pressure lengthwise of the pump-barrel and without the use of means for positively coupling the pump to the nipple. The most satisfactory results are obtained when either the face of the packing gasket 26 or the receiving end of the nipple 25 is made convex, or when both of these parts have that contour, as shown in the drawings. By this construction, the central portion of the comparatively hard or rigid bearing nipple compresses the central portion of the yielding or less rigid packing gasket and temporarily changes its contour. Enlargement or spreading of the contact between these parts as long as such longitudinal pressure continues, thus effectually preventing leakage and waste of the lubricant through said joint, even though the oil or grease is forced into tight-fitting bearings at a pressure, for example, of 3000 pounds or more to the square inch, and notwithstanding the absence of a positive connection or coupling device between the gun and the feed nipple. At the same time, the pump is quickly separable from said nipple by simply relieving the forward pressure on the pump and withdrawing its guide nozzle from the nipple, thus rendering it unnecessary to reach under the car to apply or remove said nozzle directly by hand.

When the face of the yielding packing gasket is made convex, the desired central bulge is obtained by tightly clamping its rim between the front end of the gun-nipple 42 and an internal shoulder 43 of the guide nozzle 43, as shown in Figs. 2 and 7. The guide nozzle preferably has a flared mouth and is fitted somewhat loosely on the bearing nipple, and as the face of the latter is convex, the nozzle is free to rock or swivel thereon to a limited extent, facilitating the engagement of the nozzle therewith.

To prevent undue constriction of the gasket-bore by the bearing nipple under the forward pressure of the pump or its plunger, a fixed core or stem 27 carried by the discharge-nipple 25, extends through said bore, as shown in Fig. 2. The projecting front portion of this core is reduced and provided throughout its length with longitudinal grooves or channels 28 for the passage of the grease into the bearing nipple.

In lubricating a bearing with this grease gun, after filling the magazine 22 and replacing it in the pump barrel, as hereinbefore described, the pump is joined to the bearing-nipple by passing its guide nozzle 14 over said nipple and the plunger is then pushed forward a greater or less distance, according to the amount of grease required by the bearing, some bearings requiring more than others. This pressure against the plunger handle is transmitted through the grease and the pump-body to the packing gasket, which is thereby firmly pressed against the end of the bearing-nipple, producing a tight and reliable seal, as before

described. The pump-nozzle 14 serves not only to guide the end of the pump onto the bearing nipple, but also holds it against lateral displacement thereon.

To guide the user in lubricating the bearings, the plunger rod may be provided with an adjustable gage or stop 29 adapted to strike the rear cap of the pump barrel. The gage shown in the drawings consists of a split collar which tightly embraces the said rod and is held in place by friction. If desired, the plunger rod may be provided with a scale 30 with which the gage collar co-operates.

If a bearing-nipple should not extend in the proper direction or stand at the proper angle to conveniently receive the guide-nozzle of the pump, said nipple on account of its flexibility can be bent to the desired angle by means of said nozzle and the pump body, or by a separate tube of the proper length and size to reach and fit over the bearing-nipple.

It will now be understood that the connection 24 between the guide nozzle 16 and the pump-body is rigid and that the pump body itself forms an extended handle by which the nozzle is successively engaged with the several bearing-nipples of an automobile or other piece of mechanism. This renders it possible not only to quickly join the guide-nozzle to the bearing-nipple at a distance and without the necessity of reaching under the car and doing so directly with the hands, but it also enables pressure to be conveniently exerted by means of the plunger and the pump body in the longitudinal direction of said nozzle and nipple to insure a tight joint between them and effectually prevent leakage of the lubricant at that point. For this purpose said guide nozzle and the co-operating free end of the bearing-nipple are substantially parallel with the axis of the pump-body or in straight alinement therewith, as shown, the adjustable neck of the bearing nipple making it possible to use a long pump with a rigid nozzle for exerting such straight and direct pressure on the nipple to form a tight joint or seal.

By avoiding the direct handling of the co-operating joint members of the pump and [illegible] the lubricating connection is not

in Figs. 7–9. It comprises a long and slender oil cylinder or receptacle 31, similar to the barrel 17, closed at its ends by heads 32, 33, the rear head having a stuffing box 34 through which the rod 35 of the plunger 36 passes. The cylinder has a filling spout 37 closed by a cap containing a packing gasket 38. This cap is provided with vent openings 39 which admit air into the receptacle upon partly unscrewing the cap temporarily, to permit the pump to function properly. Arranged in the front portion of the oil cylinder is a longitudinal pump-barrel 40 in which the plunger 36 reciprocates and which is provided in its walls with oil inlet ports 41 communicating with said cylinder, oil being drawn through these ports on the suction or return stroke of the pump and the ports being closed by the plunger on its forward stroke to eject the oil. The barrel 40 extends through and beyond the front head 33 and terminates in a nipple 42 similar to the nipple 27. This nipple in turn carries a guide nozzle 43 like the nozzle 16, which fits over the feed nipple 44 of the bearing 10ª. This nipple is in all respects like the bearing nipple 13 of the roller-bearing 10 and forms a tight seal with the packing gasket 45 of said nozzle when the gun or the plunger is pushed toward it. In this case, the nipple 42 of the pump barrel contains a suitable check valve 46 to prevent the escape of oil from the pump when not engaged with a bearing nipple.

A spring 47 surrounding the plunger rod between the rear end of the pump barrel 36 and a stop collar 48 on the rod serves to effect the return-stroke of the plunger, while a similar collar 49 limits the rearward stroke of said rod by encountering the adjacent cap 32.

In lubricating a bearing with this oil gun, the operation is practically the same as with the grease gun, except that the latter is emptied by one full stroke of the piston, while in the oil gun the plunger may be operated numerous times before the oil receptacle 31 requires refilling.

The pumps preferably have a sufficient capacity to lubricate an automobile several times with one filling.

In both of these embodiments of the lubri-

...n in the drawings consists of a split collar which tightly embraces the said rod and is held in place by friction. If desired, the plunger rod may be provided with a scale 30 with which the gage collar co-operates.

If a bearing-nipple should not extend in the proper direction or stand at the proper angle to conveniently receive the guide-nozzle of the pump, said nipple on account of its flexibility can be bent to the desired angle by means of said nozzle and the pump body, or by a separate tube of the proper length and size to reach and fit over the bearing-nipple.

It will now be understood that the connection 24 between the guide nozzle 16 and the pump-body is rigid and that the pump body itself forms an extended handle by which the nozzle is successively engaged with the several bearing-nipples of an automobile or other piece of mechanism. This renders it possible not only to quickly join the guide-nozzle to the bearing-nipple at a distance and without the necessity of reaching under the car and doing so directly with the hands, but it also enables pressure to be conveniently exerted by means of the plunger and the pump body in the longitudinal direction of said nozzle and nipple to insure a tight joint between them and effectually prevent leakage of the lubricant at that point. For this purpose said guide nozzle and the co-operating free end of the bearing-nipple are substantially parallel with the axis of the pump-body or in straight alinement therewith, as shown, the adjustable neck of the bearing nipple making it possible to use a long pump with a rigid nozzle for exerting such straight and direct pressure on the nipple to form a tight joint or seal.

By avoiding the direct handling of the co-operating joint members of the pump and the bearing, the lubricating operation is not only more convenient and cleaner, but an important saving of time is effected by reason of the absence of coupling devices and the use of a sliding or push-button, enabling a large number of such bearings to be quickly lubricated with ease.

Bearings which require oil rather than grease, can be quickly and conveniently lubricated in the same manner by the use of a force-pump adapted to deliver oil and having a similar discharge and guide-nozzle for receiving the nipples of such bearings. A pump suitable for this purpose is illustrated

...ings 39 which admit air into the receptacle upon partly unscrewing the cap temporarily, to permit the pump to function properly. Arranged in the front portion of the oil cylinder is a longitudinal pump-barrel 40 in which the plunger 36 reciprocates and which is provided in its walls with oil inlet ports 41 communicating with said cylinder, oil being drawn through these ports on the suction or return stroke of the pump and the ports being closed by the plunger on its forward stroke to eject the oil. The barrel 40 extends through and beyond the front head 33 and terminates in a nipple 42 similar to the nipple 27. This nipple in turn carries a guide nozzle 43 like the nozzle 16, which fits over the feed nipple 44 of the bearing 10. This nipple is in all respects like the bearing nipple 13 of the roller-bearing 10 and forms a tight seal with the packing gasket 45 of said nozzle when the gun or the plunger is pushed toward it. In this case, the nipple 42 of the pump barrel contains a suitable check valve 46 to prevent the escape of oil from the pump when not engaged with a bearing nipple.

A spring 47 surrounding the plunger rod between the rear end of the pump barrel 36 and a stop collar 48 on the rod serves to effect the return-stroke of the plunger, while a similar collar 49 limits the rearward stroke of said rod by encountering the adjacent cap 32.

In lubricating a bearing with this oil gun, the operation is practically the same as with the grease gun, except that the latter is emptied by one full stroke of the piston, while in the oil gun the plunger may be operated numerous times before the oil receptacle 31 requires refilling.

The pumps preferably have a sufficient capacity to lubricate an automobile several times with one filling.

In both of these embodiments of the lubricating system the several bearings of an automobile, motor truck, tractor or other machine can be easily and quickly lubricated without going or reaching under the car and without touching or coupling the co-operating joint-members of the pump and the part to be lubricated, rendering the operation comparatively clean and protecting the clothing as well as avoiding soiling of the hands.

In using either of the pumps, after placing its guide nozzle over the bearing nipple, the joint is sealed and a charge of lubricant

is delivered into the bearing by the single act of pushing the sliding plunger in the barrel, which furnishes the necessary pressure to form the oil-tight seal. This application of the gun-nozzle to the bearing nipple and the pushing in of the pump plunger can be done with one hand, enabling the gun to be used in restricted spaces or at points difficult of access where a gun requiring the use of both hands would be exceedingly inconvenient, if not impracticable. No couplings of any kind are employed to connect the pump to the bearing nipples and the pump can therefore be readily joined thereto as well as disconnected without the necessity of manipulating any coupling-parts and without movement of the pump barrel, except the straight forward thrust resulting from the pressure exerted against the piston rod to supply the lubricant, as hereinbefore described.

The co-operating surfaces of the guide nozzle and the bearing nipple are both uninterrupted and free from lugs or similar obstructions, and therefore permit the nozzle to be fully and freely slipped upon the nipple to obtain the necessary tight joint to prevent leakage under the relatively high pressure with which the lubricant is forced into the nipple.

Very satisfactory results have been obtained with a piston 6/16 of an inch in diameter and a discharge passage and gasket bore 3/16 of an inch in diameter, but I do not wish to be limited to these particular dimensions, as they may be varied without departing from the spirit of the invention as summed up in the appended claims.

I claim as my invention:

1. The combination with a nipple for feeding lubricant to a bearing, of means for supplying lubricant to said bearing-nipple under pressure, comprising a pump barrel adapted to bear with its delivery end against the receiving end of said bearing-nipple, a slidable piston reciprocating in said barrel and having an operating rod, a guide nozzle rigidly secured to the delivery end of said barrel in alinement therewith and adapted to loosely pass over said bearing-nipple, said guide nozzle and said bearing nipple being free from interlocking coupling members, [illegible] and adapted to withstand high pressure may be effected between said elements by the application of pressure lengthwise of the pump exerted toward said nipple from any one of a plurality of different directions.

3. The combination with a bearing-nipple having a convex receiving end, of means for supplying lubricant to said nipple under pressure, comprising a force pump provided at its delivery end with a yieldable packing-gasket having a lubricant-passage, said gasket having a convex face constructed to bear against the convex end of said nipple around the edge of the gasket-passage, thereby obtaining a reliable sealing relation between the last-mentioned parts.

4. In a lubricating system, a force-pump comprising a barrel, a sliding piston arranged therein, a guide-nozzle rigidly connected to the front end of said barrel, an apertured packing-gasket immovably arranged in said nozzle and adapted to seat against the end of a bearing-nipple, and means extending into the aperture of said gasket for resisting contraction thereof.

5. In a lubricating system, a force-pump comprising a barrel, a sliding piston arranged therein, a guide-nozzle rigidly connected to the front end of said barrel, an apertured packing-gasket immovably arranged in said nozzle and adapted to seat against the end of a bearing-nipple, and a rigid stem extending into the aperture of said gasket and having lubricant-channels.

6. The combination with a lubricant receptacle, of a compressor for supplying lubricant under pressure thereto comprising means for subjecting the lubricant to pressure by a manual force exerted upon said compressor toward said receptacle, and a rigid discharge conduit having means at its free end actuated by said force for making a sealed connection with said receptacle irrespective of the angle between said conduit and said receptacle.

7. The combination with a lubricant receptacle, of a compressor for supplying lubricant thereto, comprising a barrel having a rigid discharge conduit provided at its outer end with means for loosely receiving said lubricant receptacle and making a sealed connection therewith from various angles, a valve in said discharge con[illegible]

inconvenient, if not impracticable. No couplings of any kind are employed to connect the pump to the bearing nipples and the pump can therefore be readily joined thereto as well as disconnected without the necessity of manipulating any coupling-parts and without movement of the pump barrel, except the straight forward thrust resulting from the pressure exerted against the piston rod to supply the lubricant, as hereinbefore described.

The co-operating surfaces of the guide nozzle and the bearing nipple are both uninterrupted and free from lugs or similar obstructions, and therefore permit the nozzle to be fully and freely slipped upon the nipple to obtain the necessary tight joint to prevent leakage under the relatively high pressure with which the lubricant is forced into the nipple.

Very satisfactory results have been obtained with a piston 6/16 of an inch in diameter and a discharge passage and gasket bore 3/16 of an inch in diameter, but I do not wish to be limited to these particular dimensions, as they may be varied without departing from the spirit of the invention as summed up in the appended claims.

I claim as my invention:

1. The combination with a nipple for feeding lubricant to a bearing, of means for supplying lubricant to said bearing-nipple under pressure, comprising a pump barrel adapted to bear with its delivery end against the receiving end of said bearing-nipple, a slidable piston reciprocating in said barrel and having an operating rod, a guide nozzle rigidly secured to the delivery end of said barrel in alinement therewith and adapted to loosely pass over said bearing-nipple, said guide nozzle and said bearing nipple being free from interlocking coupling members, whereby the nozzle may be slipped on and off the bearing nipple without restraint and the delivery end of the barrel joined to the receiving end of said bearing nipple by longitudinal pressure against said piston-rod.

2. The combination with a nipple for feeding lubricant to a bearing, of a force pump for delivering the lubricant into said nipple, and complementary means located at the receiving end of said nipple and the delivery end of said pump, whereby a sealed lubricant-tight connection capable of withstanding the pressure exerted by the pump is established, said means comprising a yieldable packing-gasket having a lubricant-passage, said gasket having a convex face constructed to bear against the convex end of said nipple around the edge of the gasket-passage, thereby obtaining a reliable sealing relation between the last-mentioned parts.

4. In a lubricating system, a force-pump comprising a barrel, a sliding piston arranged therein, a guide-nozzle rigidly connected to the front end of said barrel, an apertured packing-gasket immovably arranged in said nozzle and adapted to seat against the end of a bearing-nipple, and means extending into the aperture of said gasket for resisting contraction thereof.

5. In a lubricating system, a force-pump comprising a barrel, a sliding piston arranged therein, a guide-nozzle rigidly connected to the front end of said barrel, an apertured packing-gasket immovably arranged in said nozzle and adapted to seat against the end of a bearing-nipple, and a rigid stem extending into the aperture of said gasket and having lubricant-channels.

6. The combination with a lubricant receptacle, of a compressor for supplying lubricant under pressure thereto comprising means for subjecting the lubricant to pressure by a manual force exerted upon said compressor toward said receptacle, and a rigid discharge conduit having means at its free end actuated by said force for making a sealed connection with said receptacle irrespective of the angle between said conduit and said receptacle.

7. The combination with a lubricant receptacle, of a compressor for supplying lubricant thereto, comprising a barrel having a rigid discharge conduit provided at its outer end with means for loosely receiving said lubricant receptacle and making a sealed connection therewith from various angles, a valve in said discharge conduit, and a piston operable by a manual force exerted toward said receptacle to place pressure upon the lubricant in said discharge conduit, said valve and connection-making means being actuated by the same force which actuates said piston.

8. A lubricating system comprising a receptacle for receiving lubricant, said receptacle tapering toward its outer end, a lubricant compressor having a rigid discharge conduit provided at its outer end with a coupling member rigidly secured thereto,

comprising a guide nozzle for receiving said nipple, a gasket in said nozzle for contacting with said nipple, said nipple and gasket having communicating openings.

9. A lubricating system comprising a receptacle for receiving lubricant, said receptacle tapering toward its outer end, a lubricant compressor provided at one end with a coupling member, rigidly secured thereto, comprising a guide nozzle for loosely receiving said nipple, a gasket in said sleeve for contacting with said nipple, said nipple and gasket having communicating openings.

10. A lubricating system comprising a receptacle for receiving lubricant, said receptacle tapering toward its outer end, a lubricant compressor having a rigid discharge conduit provided at its outer end with a guide nozzle for receiving said nipple, a spring pressed valve normally closing said discharge conduit, and means for establishing a sealed contact between said guide nozzle and said nipple, and at the same time opening said valve by a manual pressure exerted on said compressor in a direction toward said nipple, the connection between said guide nozzle and said nipple being such as to permit the pressure on said compressor to be exerted toward said nipple from a plurality of different directions.

11. A lubricating system comprising a receptacle for receiving lubricant, said receptacle tapering toward its outer end, a lubricant compressor having a rigid discharge conduit provided at its outer end with a guide nozzle for loosely receiving said nipple, and means for establishing a sealed contact between said guide nozzle and said nipple, the connection between said guide nozzle and said nipple being such as to permit manual pressure on said compressor to be exerted toward said nipple from a plurality of different directions.

12. The combination with a lubricant receptacle, one end of which tapers outwardly, and a compressor for supplying lubricant to said receptacle, comprising means for making a sealed connection with said nipple by manual pressure exerted upon said compressor in any one of a plurality of different directions.

13. The combination with a bearing nipple of a pump for supplying lubricant under pressure thereto, said pump having a barrel provided with a rigid discharge conduit, means connected with the free end of said discharge conduit for loosely receiving said bearing nipple and making a sealed joint therewith when manual pressure is exerted on said pump toward said bearing nipple from any one of a plurality of different directions, and means actuated by such pressure for exerting pressure on the lubricant, opening said valve, and maintaining said sealed joint.

14. The combination with a bearing nipple of a pump for supplying lubricant under pressure thereto, said pump having a barrel provided with a rigid discharge conduit, means connected with the free end of said discharge conduit for loosely receiving said bearing nipple and making a sealed joint therewith when manual pressure is exerted on said pump toward said bearing nipple from any one of a plurality of different directions, and means actuated by such pressure for exerting pressure on the lubricant.

15. The combination with a bearing nipple of a pump for supplying lubricant under pressure thereto, said pump having a barrel provided with a rigid discharge conduit, means connected with a free end of said discharge conduit for loosely receiving said bearing nipple and making a sealed joint therewith when manual pressure is exerted on said pump toward said bearing nipple from any one of a plurality of different directions, and means actuated by such pressure for maintaining said sealed joint.

16. The combination with a bearing nipple of a pump for supplying lubricant thereto, said pump having a barrel, a rigid discharge conduit extending from said barrel and provided at its free end with means for loosely receiving the end of said bearing nipple and making a sealed joint therewith from any one of a plurality of different directions, said pump comprising a piston actuated by manual pressure exerted toward and upon said bearing nipple for exerting pressure upon the lubricant in said barrel.

17. The combination with a bearing nipple, of a pump for supplying lubricant thereto, said pump having a barrel, a rigid discharge conduit extending from said barrel and provided at its free end with means for loosely receiving the end of said bearing

having communicating openings.

9. A lubricating system comprising a receptacle for receiving lubricant, said receptacle tapering toward its outer end, a lubricant compressor provided at one end with a coupling member, rigidly secured thereto, comprising a guide nozzle for loosely receiving said nipple, a gasket in said sleeve for contacting with said nipple, said nipple and gasket having communicating openings.

10. A lubricating system comprising a receptacle for receiving lubricant, said receptacle tapering toward its outer end, a lubricant compressor having a rigid discharge conduit provided at its outer end with a guide nozzle for receiving said nipple, a spring pressed valve normally closing said discharge conduit, and means for establishing a sealed contact between said guide nozzle and said nipple, and at the same time opening said valve by a manual pressure exerted on said compressor in a direction toward said nipple, the connection between said guide nozzle and said nipple being such as to permit the pressure on said compressor to be exerted toward said nipple from a plurality of different directions.

11. A lubricating system comprising a receptacle for receiving lubricant, said receptacle tapering toward its outer end, a lubricant compressor having a rigid discharge conduit provided at its outer end with a guide nozzle for loosely receiving said nipple, and means for establishing a sealed contact between said guide nozzle and said nipple, the connection between said guide nozzle and said nipple being such as to permit manual pressure on said compressor to be exerted toward said nipple from a plurality of different directions.

12. The combination with a lubricant receptacle, one end of which tapers outwardly, and a compressor for supplying lubricant to said receptacle, comprising means for making a sealed connection with said nipple by manual pressure exerted upon said compressor in any one of a plurality of different directions.

13. The combination with a bearing nipple of a pump for supplying lubricant under pressure thereto, said pump having a barrel provided with a rigid discharge conduit, a spring pressed valve in said discharge conduit, means connected with therewith when manual pressure is exerted on said pump toward said bearing nipple from any one of a plurality of different directions, and means actuated by such pressure for exerting pressure on the lubricant, opening said valve, and maintaining said sealed joint.

14. The combination with a bearing nipple of a pump for supplying lubricant under pressure thereto, said pump having a barrel provided with a rigid discharge conduit, means connected with the free end of said discharge conduit for loosely receiving said bearing nipple and making a sealed joint therewith when manual pressure is exerted on said pump toward said bearing nipple from any one of a plurality of different directions, and means actuated by such pressure for exerting pressure on the lubricant.

15. The combination with a bearing nipple of a pump for supplying lubricant under pressure thereto, said pump having a barrel provided with a rigid discharge conduit, means connected with a free end of said discharge conduit for loosely receiving said bearing nipple and making a sealed joint therewith when manual pressure is exerted on said pump toward said bearing nipple from any one of a plurality of different directions, and means actuated by such pressure for maintaining said sealed joint.

16. The combination with a bearing nipple of a pump for supplying lubricant thereto, said pump having a barrel, a rigid discharge conduit extending from said barrel and provided at its free end with means for loosely receiving the end of said bearing nipple and making a sealed joint therewith from any one of a plurality of different directions, said pump comprising a piston actuated by manual pressure exerted toward and upon said bearing nipple for exerting pressure upon the lubricant in said barrel.

17. The combination with a bearing nipple, of a pump for supplying lubricant thereto, said pump having a barrel, a rigid discharge conduit extending from said barrel and provided at its free end with means for loosely receiving the end of said bearing nipple and making a sealed joint therewith from any one of a plurality of different directions when manual pressure is exerted upon said pump toward said receptacle.

CHARLES W. MANZEL.

DISCLAIMER.

1,459,662.—*Charles W. Manzel*, Buffalo, N. Y. LUBRICATING SYSTEM. Patent dated June 19, 1923. Disclaimer filed May 21, 1928, by the assignee, *The Bassick Manufacturing Company.*

Hereby enters this disclaimer to that part of the claims in said specification which is in the following words, to wit:

"8. A lubricating system comprising a receptacle for receiving lubricant, said receptacle tapering toward its outer end, a lubricant compressor having a rigid discharge conduit provided at its outer end with a coupling member rigidly secured thereto, comprising a guide nozzle for receiving said nipple, a gasket in said nozzle for contacting with said nipple, said nipple and gasket having communicating openings.

"9. A lubricating system comprising a receptable for receiving lubricant, said receptacle tapering toward its outer end, a lubricant compressor provided at one end with a coupling member, rigidly secured thereto, comprising a guide nozzle for loosely receiving said nipple, a gasket in said sleeve for contacting with said nipple, said nipple and gasket having communicating openings."

[*Official Gazette June 5, 1928.*]

508

May 20, 1924. 1,494,652

C. F. WALLACE

GREASE CONTAINER

Filed Jan. 11 1922

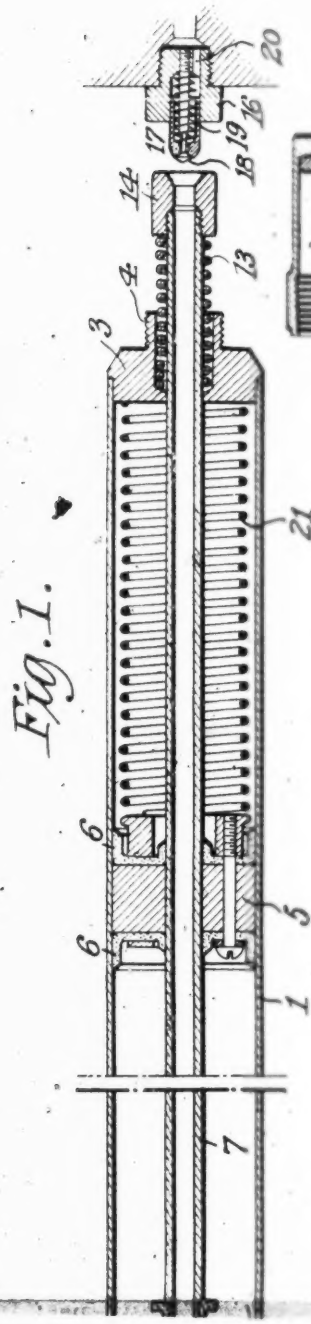


Fig. 1.

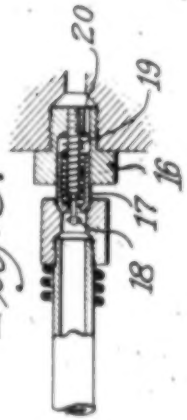


Fig. 3.

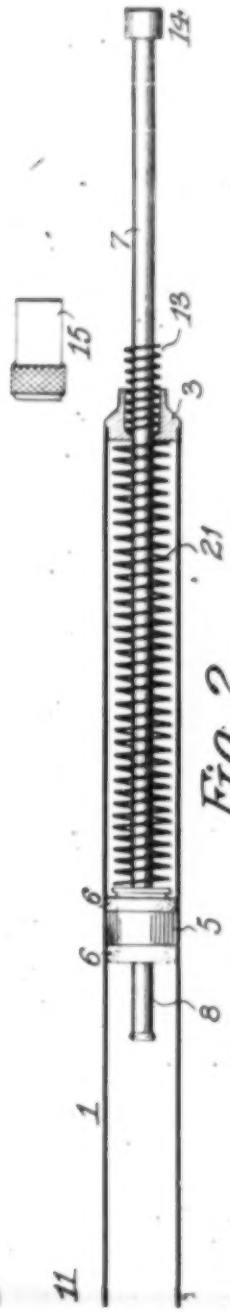
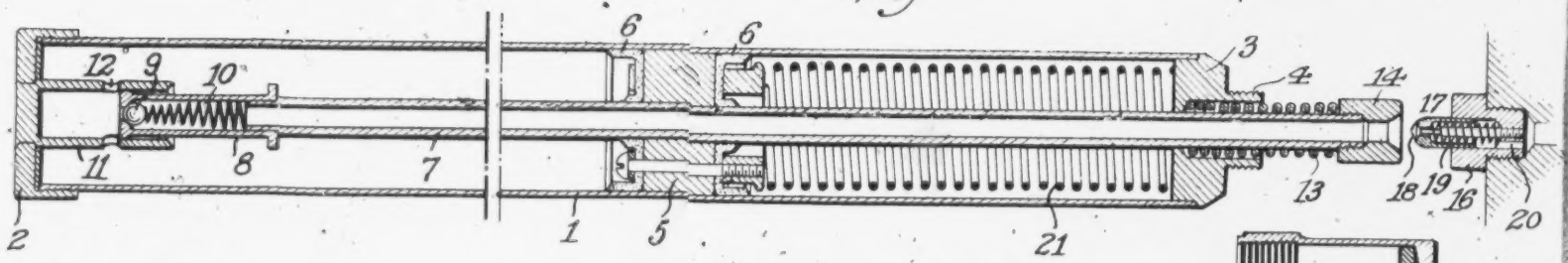


Fig. 2.

Fig. 1.



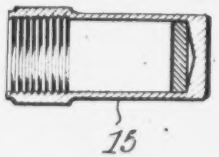
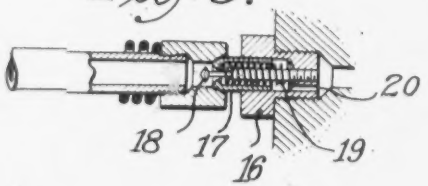


Fig. 3.



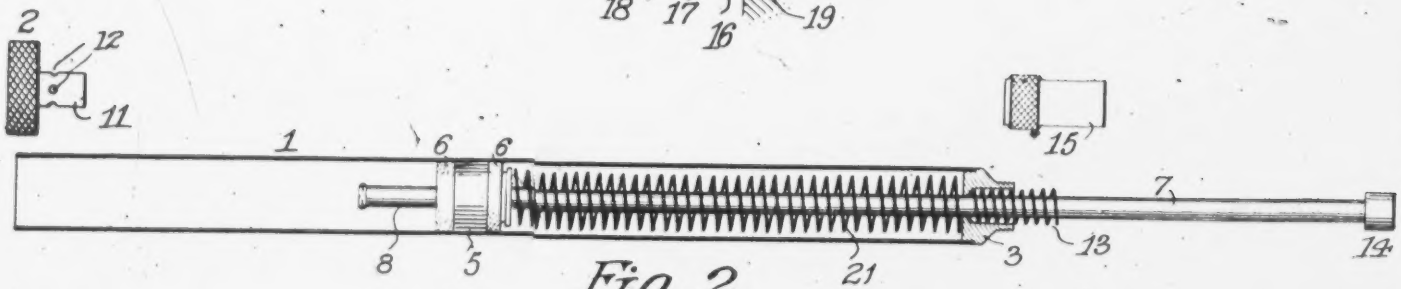


Fig. 2.

INVENTOR
Charles A. Wallace.
BY
Coupland, Hirst & Hudson,
ATTORNEYS.

Patented May 20, 1924. 1,494,652

UNITED STATES PATENT OFFICE.

CHARLES F. WALLACE, OF WESTFIELD, NEW JERSEY.

GREASE CONTAINER.

Application filed January 11, 1922. Serial No. 528,422. REISSUED

To all whom it may concern:

Be it known that I, CHARLES F. WALLACE, being a citizen of the United States, residing at Westfield, in the county of Union and State of New Jersey, U. S. A., have invented certain new and useful Improvements in Grease Containers, of which the following is a full, clear, and exact description.

The invention for which by these presents I seek protection by Letters Patent of the United States, is an improvement in forced feed lubricating devices, more commonly known as grease guns, which in general may be described as means for applying under a certain pressure, the lubricant to such parts as the bearings of internal combustion engines and the like.

Usually such parts are lubricated by heavy oil or grease stored in permanent receptacles attached to the engine, or by means which require the removal of caps or other parts to permit access to the bearings, and by devices which are unhandy and more or less difficult to use or manipulate. My object has been, in the devising of the means hereinafter set forth, to produce a simple and thoroughly practicable device that will accomplish the desired results more quickly and easily than others heretofore intended or used for this purpose, and to this end my improvement comprises a cylinder containing a spring actuated piston and constituting the reservoir for a heavy oil or grease, and having a tube longitudinally movable therein against spring pressure provided with a grease pump at the rear end, and a discharge conical cavity at the forward end which is designed to fit over a specially designed connection attached to the part to be lubricated.

This device in the most practicable form in which I have produced it is illustrated in the accompanying drawing, in which—

Fig. 1 is a longitudinal section of the instrument is a metal cylinder 1, threaded at its rear end to receive a cap 2, and having at its forward end a closing head 3 provided with a threaded extension 4. Within this cylinder is a piston 5 with double cup leathers 6 and a spiral spring 21 intermediate said piston and the head 3. The function of this spring is merely for the purpose of maintaining the piston in contact with the body of contained lubricant in order that the latter may be maintained at the rear end of the container in all positions of the latter. It does not have sufficient force to do more than this.

Extending entirely through the cylinder 1 is a tube 7, the piston 5 and the head 3 having suitable openings through them to permit its free passage. The rear end of the said tube carries a cap or extension 8 having a perforated closed end and containing a ball valve 9 seated on a spiral spring 10.

The cap 2 has a cylindrical extension 11 with ports 12, and fits snugly over the cap or extension 8.

At the forward end of the instrument a spiral spring 13 is interposed between a head 14 and the head 3 the said head 14 being screwed to the end of the tube 7. This head 14 forms the discharge end of the tube and is formed with a conical cavity. A screw cap 15 is used to close the tube 7 when the device is not in use, and this cap screws onto the extension 4.

With this device are used connections with the bearings or other parts to be lubricated consisting of plugs 16 hollowed out to receive a movable cup 17 and a plunger 18, with a head that normally closes the passage into the plug, and a spiral spring 19 that tends to keep the passage into the plug closed. These plugs are set or screwed into the stationary parts of the apparatus to be

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This device in the most practicable form in which I have produced it is illustrated in the accompanying drawing, in which—

Fig. 1 is a longitudinal section of the grease gun, showing detached therefrom a screw cap and the device connected to the part to be lubricated through which the grease is forced.

Fig. 2 is a general view, mainly in elevation of the same device, the two caps being shown as detached.

Fig. 3 is a sectional view of the discharge end of the gun in operative relation to the connection to the bearing or other part to be lubricated.

The main portion of the body of the instrument is a metal cylinder 1, threaded at its rear end to receive a cap 2, and having at its forward end a closing head 3 provided with a threaded extension 4. Within this cylinder is a piston 5 with double cup leathers 6 and a spiral spring 21 intermediate said piston and the head 3. The function of this spring is merely for the purpose of maintaining the piston in contact with the body of contained lubricant in order that the latter may be maintained at the rear end of the container in all positions of the latter. It does not have sufficient force to do more than this.

Extending entirely through the cylinder 1 is a tube 7, the piston 5 and the head 3 having suitable openings through them to permit its free passage. The rear end of the said tube carries a cap or extension 8 having a perforated closed end and containing a ball valve 9 seated on a spiral spring 10.

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With this device are used connections with the bearings or other parts to be lubricated consisting of plugs 16 hollowed out to receive a movable cup 17 and a plunger 18, with a head that normally closes the passage into the plug, and a spiral spring 19 that tends to keep the passage into the plug closed. These plugs are set or screwed into the stationary parts of the apparatus to be lubricated and contain passages 20 leading to the bearings or other parts which are to receive the lubricant.

The operation of the device is as follows. To fill the gun the cap 2 is removed and the heavy oil or grease is either drawn or packed in until the piston 5 is forced back to the limit of the possible compression of the spiral spring, when the cap 2 is replaced. The tube 7 may be drawn out of the forward end of the container engaging with the piston 5 and moving the same to create the motion that draws in the lubri-

cant. The only function of the spring 21 is thereafter to keep the piston 5 firmly against the body of grease within the cylinder.

When lubricant is to be applied the cap 15 is removed and the conical cavity in the head 14 is placed over the rounded end of the cup of the plug 16. The cylinder 1 is then forced forward one or two times with the result that the parts 8 and 12, acting as a force pump when the rear end of the tube 7 is forced into the cylindrical extension 11, force grease through the tube 7 and thence through the opening in the cup 17, formed when said cup is forced back by the pressure applied to the cylinder 1.

When pressure on the cylinder ceases, the spring 13 compressed by such pressure withdraws the valve containing cap 8 from the hollow extension 11 and this draws in the grease from the cylinder 1 through the ports 12, and in this way a measured quantity of grease may be injected into and through the connections 14 at each stroke or forward movement of the device.

This device has many advantages. No fixed connections between the grease supply and the parts to be lubricated are necessary. The bearings or other parts are always closed to prevent access of dirt thereto. The rounded head of the connection and the conical cavity in the tube 7 constitute a ball and socket joint, thus permitting the device to be applied and used at widely varying angles, and the rounded top of the connection may be readily cleaned before applying the grease gun.

Broadly considered the plug connection by which the grease is introduced, is any device in which the pressure of the gun or the pressure of the grease in the gun opens the passage to the parts to be lubricated, and the connection illustrated is merely typical of such devices. It should further be pointed out that the area of the pump in the grease gun must be equal to or greater than the area of contact between the gun and the grease cup or connection as otherwise the grease would escape at the entrance at the end of the gun when pressure is applied to operate the pump.

By means of this device a considerable

of the container, a longitudinally movable tube extending through the container and the piston and having a projecting part that engages with and moves the piston when it is drawn forward and compresses the piston spring, thereby providing back of said piston a suction that may be utilized for filling the container with lubricant when the cap is removed.

2. A forced feed lubricating device comprising in combination, a container for the lubricant, a longitudinally movable tube extending through the container, a force pump at the rear of the container operated by the reciprocatory movement of said tube, a piston through which said tube passes, and a spring acting on said piston with only sufficient force to maintain it in contact with the contained lubricant.

3. A forced feed lubricating device comprising in combination, a container for the lubricant and a spring-seated piston therein adapted by the force of its spring to be merely maintained in contact with the body of contained lubricant, a pump chamber containing side perforations attached to the rear end of the container, a longitudinally movable lubricant tube with a closed end extending through the container and forming with the pump chamber a piston tube, a valve in the closed end of said tube, and a spiral spring acting upon the tube and having sufficient force to restore the same after it has been forced back and thereby create in the pump a suction which fills it with lubricant.

4. A forced feed lubricating device comprising in combination, a cylindrical container, a reciprocatory tube extending through the same, and a force pump at the rear end of the container for which said tube constitutes the piston, said tube having a valve controlled orifice in its rear closed end, and a passage for lubricant in its forward end, the areas of the said passage and of the force pump chamber being different, for the purpose set forth.

5. A device of the kind described, comprising in combination, a cylindrical grease container, a piston therein, a spring acting upon said piston with only sufficient force to maintain it in contact with the contained lubricant, a hollow tube extending through

end of the tube 7 is forced into the cylindrical extension 11, force grease through the tube 7 and thence through the opening in the cup 17, formed when said cup is forced back by the pressure applied to the cylinder 1.

When pressure on the cylinder ceases, the spring 13 compressed by such pressure withdraws the valve containing cap 8 from the hollow extension 11 and this draws in the grease from the cylinder 1 through the ports 12, and in this way a measured quantity of grease may be injected into and through the connections 14 at each stroke or forward movement of the device.

This device has many advantages. No fixed connections between the grease supply and the parts to be lubricated are necessary. The bearings or other parts are always closed to prevent access of dirt thereto. The rounded head of the connection and the conical cavity in the tube 7 constitute a ball and socket joint, thus permitting the device to be applied and used at widely varying angles, and the rounded top of the connection may be readily cleaned before applying the grease gun.

Broadly considered the plug connection by which the grease is introduced, is any device in which the pressure of the gun or the pressure of the grease in the gun opens the passage to the parts to be lubricated, and the connection illustrated is merely typical of such devices. It should further be pointed out that the area of the pump in the grease gun must be equal to or greater than the area of contact between the gun and the grease cup or connection as otherwise the grease would escape at the entrance at the end of the gun when pressure is applied to operate the pump.

By means of this device a considerable number of bearings or other parts may be lubricated in much shorter time than is now required for the proper use of any other device for a similar purpose of which I am aware.

Having now described my improvement of its mode of operation or use, what I claim is—

1. A forced feed lubricating device comprising in combination, a container, a removable cap closing its rear end, a spring-actuated piston occupying the forward part

[illegible] in combination, a container lubricant, a longitudinally movable tube extending through the container, a force pump at the rear of the container operated by the reciprocatory movement of said tube, a piston through which said tube passes, and a spring acting on said piston with only sufficient force to maintain it in contact with the contained lubricant.

3. A forced feed lubricating device comprising in combination, a container for the lubricant and a spring-seated piston therein adapted by the force of its spring to be merely maintained in contact with the body of contained lubricant, a pump chamber containing side perforations attached to the rear end of the container, a longitudinally movable lubricant tube with a closed end extending through the container and forming with the pump chamber a piston tube, a valve in the closed end of said tube, and a spiral spring acting upon the tube and having sufficient force to restore the same after it has been forced back and thereby create in the pump a suction which fills it with lubricant.

4. A forced feed lubricating device comprising in combination, a cylindrical container, a reciprocatory tube extending through the same, and a force pump at the rear end of the container for which said tube constitutes the piston, said tube having a valve controlled orifice in its rear closed end, and a passage for lubricant in its forward end, the areas of the said passage and of the force pump chamber being different, for the purpose set forth.

5. A device of the kind described, comprising in combination, a cylindrical grease container, a piston therein, a spring acting upon said piston with only sufficient force to maintain it in contact with the contained lubricant, a hollow tube extending through the forward end of the container and the piston, a force pump connected with the rear end of the tube, which operates to force lubricant from the container through the tube when the latter is pushed back into the container and a spring acting upon said tube to withdraw it from its pushed back position therein.

6. A device of the kind described, comprising in combination, a cylindrical grease container, a cap for the rear end thereof having a hollow extension with ports in its

ide walls, a spring seated piston in the container, a spring acting upon said piston with only sufficient force to maintain it in contact with the contained lubricant, a reciprocatory tube extending longitudinally through the container and piston, and a valve controlled attachment at its end which enters the hollow extension in the cap, and forms therewith a pump to force lubricant from the container through the tube.

In testimony whereof I hereto affix my signature.

CHARLES F. WALLACE.

512

Nov. 22, 1927. Re. 16,787

C. F. WALLACE

GREASE CONTAINER

Original Filed Jan. 11, 1922

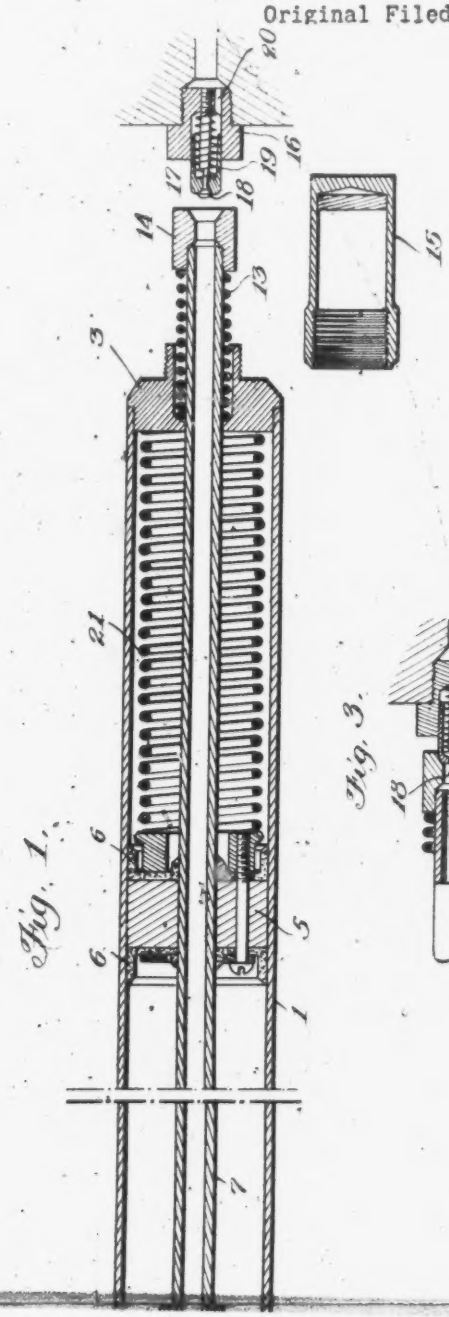


Fig. 1.

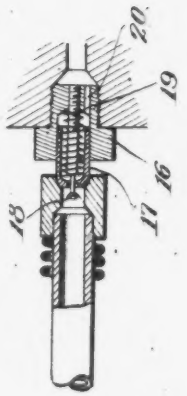


Fig. 3.

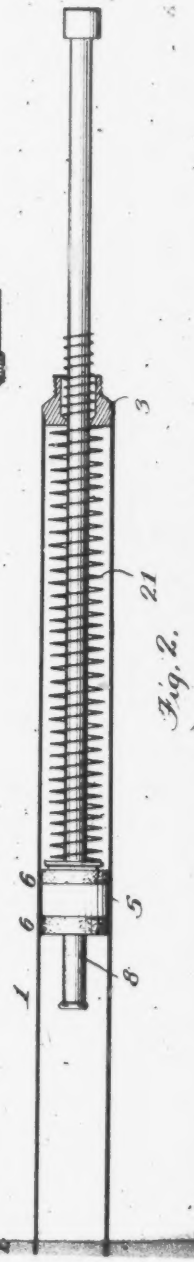
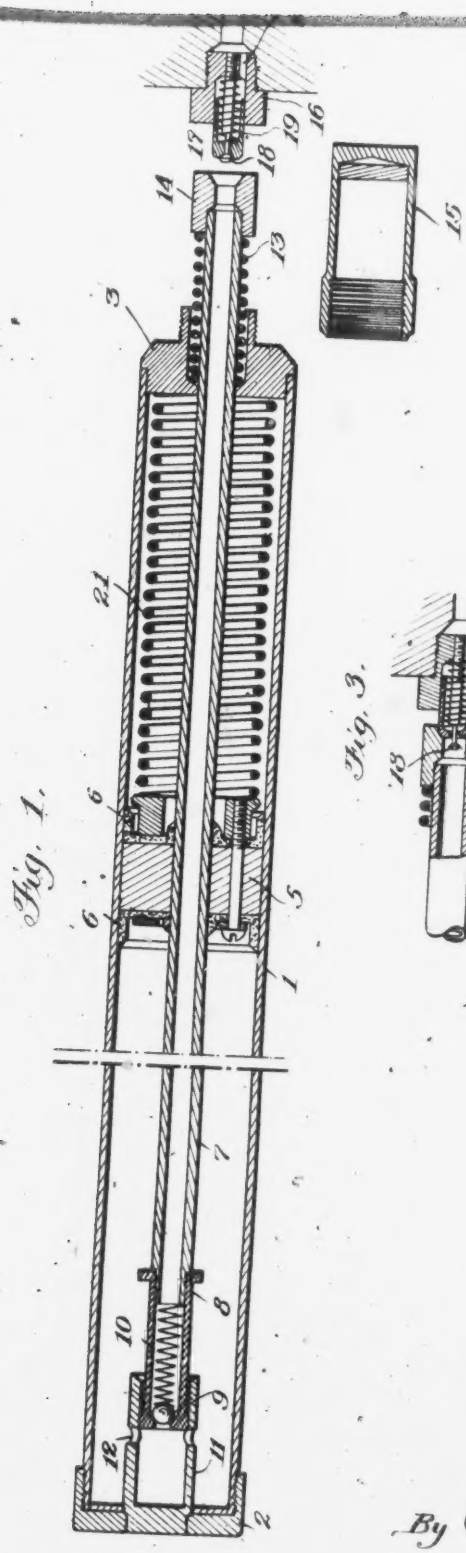
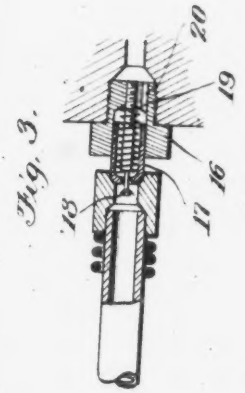


Fig. 2.





Inventor
Charles F. Wallace

By Pierce & Swart.
Attys

Reissued Nov. 22, 1927. Re. 16,787

UNITED STATES PATENT OFFICE.

CHARLES F. WALLACE, OF WESTFIELD, NEW JERSEY, ASSIGNOR TO THE BASSICK MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF DELAWARE.

GREASE CONTAINER.

Original No. 1,494,652, dated May 20, 1924, Serial No. 528,422, filed January 11, 1922. Application for reissue filed October 8, 1925. Serial No. 61,380.

The invention for which by these presents I seek protection by Letters Patent of the United States, is an improvement in forced feed lubricating devices, more commonly known as grease guns, which in general may be described as means for applying under a certain pressure, the lubricant to such parts as the bearings of internal combustion engines and the like.

Usually such parts are lubricated by heavy oil or grease stored in permanent receptacles attached to the engine, or by means which require the removal of caps or other parts to permit access to the bearings, and by devices which are unhandy and more or less difficult to use or manipulate. My object has been, in the devising of the means hereinafter set forth, to produce a simple and thoroughly practicable device that will accomplish the desired results more quickly and easily than others heretofore intended or used for this purpose, and to this end my improvement comprises a cylinder containing a spring actuated piston and constituting the reservoir for a heavy oil or grease, and having a tube longitudinally movable therein against spring pressure provided with a grease pump at the rear end, and a discharge conical cavity at the forward end which is designed to fit over a specially designed connection attached to the part to be lubricated.

This device in the most practicable form in which I have produced it is illustrated in the accompanying drawing, in which

Figure 1 is a longitudinal section of the grease gun, showing detached therefrom a screw cap and the device connected to the part to be lubricated through which the [illegible] forced.

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The cap 2 has a cylindrical extension 11 with ports 12, and fits snugly over the cap or extension 8.

At the forward end of the instrument a spiral spring 13 is interposed between a head 14 and the head 3, the said head 14 being screwed to the end of the tube 7. This head 14 forms the discharge end of the tube and is formed with a conical cavity. A screw cap 15 is used to close the tube 7 when the device is not in use, and this cap screws onto the extension 4.

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Figure 2 is a general view, mainly in elevation of the same device, the two caps being shown as detached.

Figure 3 is a sectional view of the discharge end of the gun in operative relation to the connection to the bearing or other part to be lubricated.

The main portion of the body of the instrument is a metal cylinder 1, threaded at its rear end to receive a cap 2, and having at its forward end a closing head 3 provided with a threaded extension 4. Within this cylinder is a piston 5 with double cap leathers 6 and a spiral spring 21 intermediate said piston and the head 3. The function of this spring is merely for the purpose of maintaining the piston in contact with the body of contained lubricant in order that the latter may be maintained at the rear end of the container in all positions of the latter. It does not have sufficient force to do more than this.

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The operation of the device is as follows: To fill the gun the cap 2 is removed and the heavy oil or grease is either drawn or packed in until the piston 5 is forced back to the limit of the possible compression of the spiral spring, when the cap 2 is replaced. The tube 7 may be drawn out of the forward end of the container engaging with the piston 5 and moving the same to create the motion that draws in the lubricant. The only function of the spring 21 is thereafter to keep the piston 5 firmly against the body of grease within the cylinder.

When lubricant is to be applied the cap 15

is removed and the conical cavity in the head 14 is placed over the rounded end of the cup of the plug 16. The cylinder 1 is then forced forward one or two times with the result that the parts 8 and 12, acting as a force pump when the rear end of the tube 7 is forced into the cylindrical extension 11, force grease through the tube 7 and thence through the opening in the cup 17, formed when said cup is forced back by the pressure applied to the cylinder 1.

When pressure on the cylinder ceases, the spring 13 compressed by such pressure withdraws the valve containing cap 8 from the hollow extension 11 and this draws in the grease from the cylinder 1 through the ports 12, and in this way a measured quantity of grease may be injected into and through the connections 14 at each stroke or forward movement of the device.

This device has many advantages. No fixed connections between the grease supply and the parts to be lubricated are necessary. The bearings or other parts are always closed to prevent access of dirt thereto. The rounded head of the connection and the conical cavity in the tube 7 constitute a ball and socket joint, thus permitting the device to be applied and used at widely varying angles, and the rounded top of the connection may be readily cleaned before applying the grease gun.

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By means of this device a considerable number of bearings or other parts may be lubricated in much shorter time than is now required for the proper use of any other device for a similar purpose of which I am

piston a suction that may be utilized for filling the container with lubricant when the cap is removed.

2. A forced feed lubricating device comprising in combination, a container for the lubricant, a longitudinally movable tube extending through the container, a force pump at the rear of the container operated by the reciprocatory movement of said tube, a piston through which said tube passes, and a spring acting on said piston with only sufficient force to maintain it in contact with the contained lubricant.

3. A forced feed lubricating device comprising in combination, a container for the lubricant and a spring-seated piston therein adapted by the force of its spring to be merely maintained in contact with the body of contained lubricant, a pump chamber containing side perforations attached to the rear end of the container, a longitudinally movable lubricant tube with a closed end extending through the container and forming with the pump chamber a piston tube, a valve in the closed end of said tube, and a spiral spring acting upon the tube and having sufficient force to restore the same after it has been forced back and thereby create in the pump a suction which fills it with lubricant.

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Having now described my improvement of its mode of operation or use, what I claim is:—

1. A forced feed lubricating device comprising in combination, a container, a removable cap closing its rear end, a spring-actuated piston occupying the forward part of the container, a longitudinally movable tube extending through the container and the piston and having a projecting part that engages with and moves the piston when it is drawn forward and compresses the piston spring, thereby providing back of said [illegible] ficient force to maintain it in contact with the contained lubricant.

3. A forced feed lubricating device comprising in combination, a container for the lubricant and a spring-seated piston therein adapted by the force of its spring to be merely maintained in contact with the body of contained lubricant, a pump chamber containing side perforations attached to the rear end of the container, a longitudinally movable lubricant tube with a closed end extending through the container and forming with the pump chamber a piston tube, a valve in the closed end of said tube, and a spiral spring acting upon the tube and having sufficient force to restore the same after it has been forced back and thereby create in the pump a suction which fills it with lubricant.

4. A forced feed lubricating device comprising in combination, a cylindrical container, a reciprocatory tube extending through the same, and a force pump at the rear end of the container for which said tube constitutes the piston, said tube having a valve controlled orifice in its rear closed end, and a passage for lubricant in its forward end, the areas of the said passage and of the force pump chamber being different, for the purpose set forth.

5. A device of the kind described, comprising in combination, a cylindrical grease container, a piston therein, a spring acting upon said piston with only sufficient force to maintain it in contact with the contained lubricant, a hollow tube extending through the forward end of the container and the piston, a force pump connected with the rear end of the tube, which operates to force lubricant from the container through the tube when the latter is pushed back into the container and a spring acting upon said tube to withdraw it from its pushed back position therein.

6. A device of the kind described, comprising in combination, a cylindrical grease container, a cap for the rear end thereof having a hollow extension with ports in its side walls, a spring seated piston in the container, a spring acting upon said piston with only sufficient force to maintain it in contact with the contained lubricant, a reciprocatory tube extending longitudinally through the container and piston, and a valve control-

attachment at its end which enters the hollow extension in the cap, and forms therewith a pump to force lubricant from the container through the tube.

7. A lubricating system comprising a lubricant receiving member having a rounded head provided with a passageway for lubricant, and a compressor for supplying lubricant to said receiver comprising a container for lubricant, a discharge tube reciprocable with respect to said container and communicating with said container, means actuated by the reciprocation of said container with respect to said discharge tube for forcing lubricant under pressure through said discharge tube, means slidably mounted in said container for exerting pressure on the lubricant therein, and means carried by the outer end of said discharge tube for making sealed contact with said rounded head from any one of a plurality of angularly related positions, said last named means being actuated by the pressure exerted against said container toward said member, in reciprocating said container, to maintain a sealed connection with said rounded head.

8. A lubricating system comprising a lubricant receiving member having a head provided with a passageway for lubricant, and a compressor for supplying lubricant to said receiver, comprising a container for lubricant, a discharge tube reciprocable with respect to said container and communicating with said container, means actuated by the reciprocation of said container with respect to said discharge tube for forcing lubricant under pressure through said discharge tube, and means carried by the outer end of said discharge tube for making sealed contact with said head from any one of a plurality of angularly related positions, said last named means being actuated by the pressure exerted against said container toward said member, in reciprocating said container, to maintain a sealed connection with said head.

9. A lubricating system comprising a receptacle for receiving lubricant, said receptacle comprising a spherical head and a compressor comprising a container, means in said container for exerting pressure on the lubricant therein, a cylinder, a discharge tube communicating with said cylinder and terminating in a member having a depres-

10. A lubricating system comprising a lubricant receiving member having a passageway for lubricant, and a compressor for supplying lubricant to said receiver, comprising a container for lubricant, a discharge tube coaxial with, and reciprocable with respect to said container, means interposed between, and effecting communication between said container and said discharge tube for forcing lubricant under pressure through said discharge tube when said container is reciprocated relatively to said discharge tube, means for causing lubricant to pass from said container to said forcing means, and means carried by the outer end of said discharge tube for making sealed contact with said receiving member from any one of a plurality of different angularly related positions, said sealed contact being maintained by the pressure exerted in moving said container relatively to said discharge tube.

11. A lubricating system comprising a lubricant receiving member having a passageway for lubricant, and a compressor for supplying lubricant to said receiver, comprising a container for lubricant, a discharge tube reciprocable with respect to said container, means interposed between, and effecting communication between, said container and said discharge tube for forcing lubricant under pressure through said discharge tube when said container is reciprocated relatively to said discharge tube, means for causing lubricant to pass from said container to said forcing means, and means carried by the outer end of said discharge tube for making sealed contact with said receiving member from any one of a plurality of different angularly related positions, said sealed contact being maintained by the pressure exerted in moving said container relatively to said discharge tube.

12. A lubricant compressor comprising a container for lubricant, a cylinder communicating with said container, elements at opposite ends of said compressor for receiving oppositely directed thrusts, one of said elements having a passageway communicating with said cylinder, means actuated by a thrust imposed upon one of said elements, for discharging lubricant from said cylinder through said passageway, and means sur-

…, a discharge tube reciprocable with respect to said container and communicating with said container, means actuated by the reciprocation of said container with respect to said discharge tube for forcing lubricant under pressure through said discharge tube, means slidably mounted in said container for exerting pressure on the lubricant therein, and means carried by the outer end of said discharge tube for making sealed contact with said rounded head from any one of a plurality of angularly related positions, said last named means being actuated by the pressure exerted against said container toward said member, in reciprocating said container, to maintain a sealed connection with said rounded head.

8. A lubricating system comprising a lubricant receiving member having a head provided with a passageway for lubricant, and a compressor for supplying lubricant to said receiver, comprising a container for lubricant, a discharge tube reciprocable with respect to said container and communicating with said container, means actuated by the reciprocation of said container with respect to said discharge tube for forcing lubricant under pressure through said discharge tube, and means carried by the outer end of said discharge tube for making sealed contact with said head from any one of a plurality of angularly related positions, said last named means being actuated by the pressure exerted against said container toward said member, in reciprocating said container, to maintain a sealed connection with said head.

9. A lubricating system comprising a receptacle for receiving lubricant, said receptacle comprising a spherical head and a compressor comprising a container, means in said container for exerting pressure on the lubricant therein, a cylinder, a discharge tube communicating with said cylinder and terminating in a member having a depression, communicating with said discharge tube, for making sealed contact with said head from any one of a plurality of different angular positions, and means interposed between said cylinder and said tube for placing pressure, greater than the pressure in said container, upon the lubricant discharged through said tube, when a force is applied to said compressor in the direction of said fitting, said force being effective in maintaining a sealed connection between said discharge tube and said head.

lubricant under pressure through said discharge tube when said container is reciprocated relatively to said discharge tube, means for causing lubricant to pass from said container to said forcing means, and means carried by the outer end of said discharge tube for making sealed contact with said receiving member from any one of a plurality of different angularly related positions, said sealed contact being maintained by the pressure exerted in moving said container relatively to said discharge tube.

11. A lubricating system comprising a lubricant receiving member having a passageway for lubricant, and a compressor for supplying lubricant to said receiver, comprising a container for lubricant, a discharge tube reciprocable with respect to said container, means interposed between, and effecting communication between, said container and said discharge tube for forcing lubricant under pressure through said discharge tube when said container is reciprocated relatively to said discharge tube, means for causing lubricant to pass from said container to said forcing means, and means carried by the outer end of said discharge tube for making sealed contact with said receiving member from any one of a plurality of different angularly related positions, said sealed contact being maintained by the pressure exerted in moving said container relatively to said discharge tube.

12. A lubricant compressor comprising a container for lubricant, a cylinder communicating with said container, elements at opposite ends of said compressor for receiving oppositely directed thrusts, one of said elements having a passageway communicating with said cylinder, means actuated by a thrust imposed upon one of said elements, for discharging lubricant from said cylinder through said passageway, and means surrounding one of said elements, and movable with respect to said cylinder for pressing the lubricant in said container toward said cylinder.

13. A lubricant compressor comprising a container for lubricant, a cylinder communicating with said container, a discharge tube for said cylinder, and a piston in said container, movable with respect to and surrounding said tube, for causing lubricant to be displaced from said container into said cylinder.

14. A lubricant compressor comprising a

container for lubricant, a cylinder communicating with said container, means for displacing lubricant from said cylinder including a member in said container, and a piston, movable with respect to and surrounding said member, for displacing lubricant from said container into said cylinder.

15. A lubricant compressor comprising a cylindrical container, a pump cylinder of smaller diameter than said container and communicating with said container, said pump cylinder and container being coaxial, means, caused to act by a thrust exerted along the axis of said container, for discharging lubricant from said pump cylinder, said means acting as a valve to prevent return flow of lubricant to said container, means reciprocable with respect to said container for conducting lubricant from said pump cylinder, and piston means in said container for continuously pressing against the lubricant in said container.

16. A lubricating apparatus of the class described comprising in combination a nozzle having an outwardly flaring cavity and a fitting having a contacting surface to be embraced within the flaring cavity of the nozzle, said nozzle and fitting adapted to form a lubricant-tight connection in any one of a plurality of angularly different relationships and being formed to provide a circular line of contact in any angle within the range of their cooperability.

17. In lubricating apparatus of the class described a union comprising a conduit member communicating with a source of lubricant, said conduit member formed of non-compressible material and terminating in an end having a conical outwardly flaring cavity, a second conduit member formed of non-compressible material and having a spherical head adapted to be received in the cavity of said first conduit member, and means to press said first conduit member against said second conduit member in any one of a plurality of angular relationships to effect a lubricant-tight seal between said members.

In witness whereof, I hereunto subscribe my name, this 24 day of September, 1925.

CHARLES F. WALLACE.

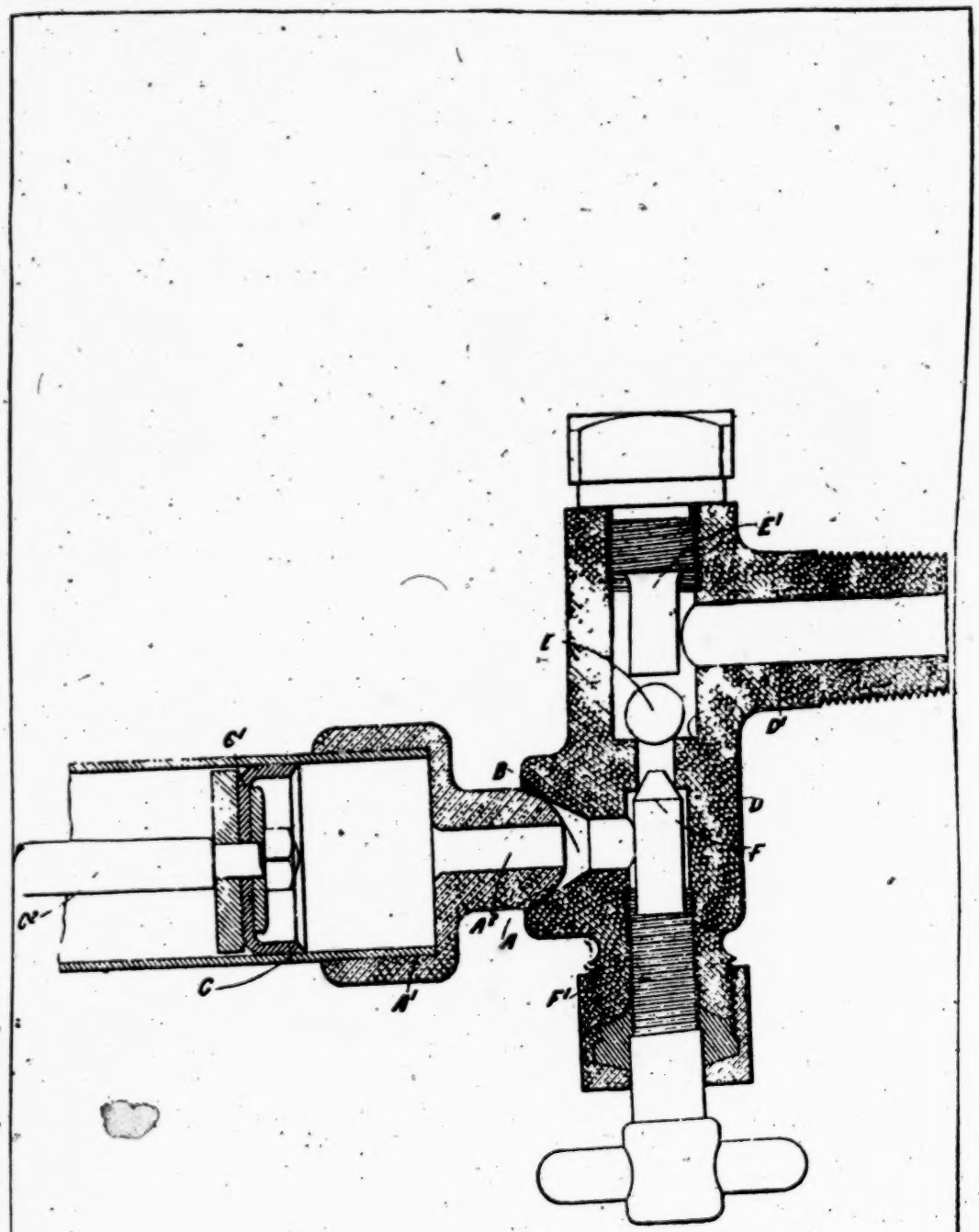
CLA

This Drawing is a reproduction of the original size reduced scale.

A.D. 1904. MARCH 22. N.º 6940.

CLARKSON'S COMPLETE SPECIFICATION.

1 SHEET



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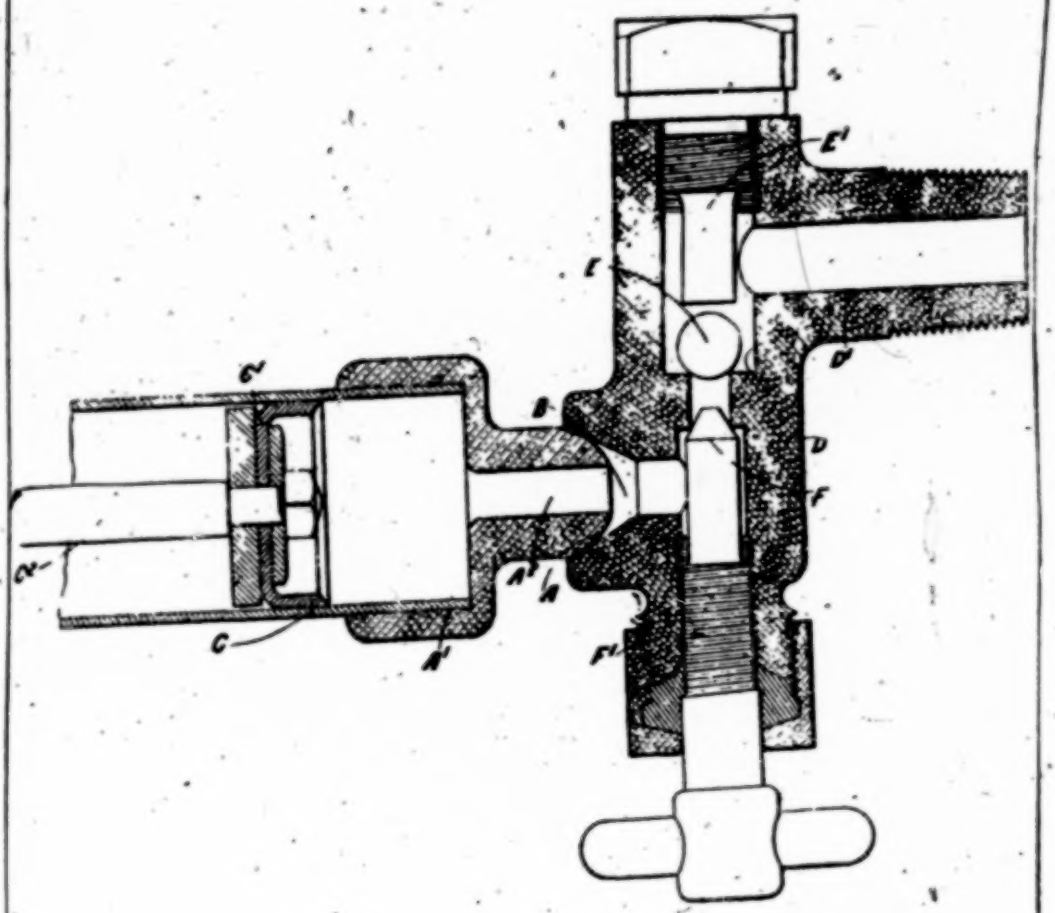

This Drawing is a reproduction of the original case enlarged scale.

venient manner and the end part of the pump which rests in this recess may be attached to the end of the pump barrel in any suitable manner, or it may be integral with it.

Dated this 22nd day of March 1904.

THOMAS CLARKSON,
Boult, Wade & Kilburn,
Agents for the Applicant.

COMPLETE SPECIFICATION.

"Improvements in or relating to Temporary Joints for Pipes and the like."

I, Thomas Clarkson, Engineer, of Moulsham Works, Chelmsford, in the County of Essex, do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement:—

This invention relates to temporary joints between two pipes or conduits, such, for example, as connecting a hand or foot air pump with a pressure or storage tank, as employed on motor vehicles. Hitherto it has been usual to connect the pump to the valve or pipe connection on the tank by a rubber tube having a screw-threaded nut or union adapted to engage with a corresponding nozzle on the pipe. As oil has a deleterious effect on the rubber, these tubes constantly require renewal, and the screw-thread is apt to be destroyed or the cap wrenched off and the screw thread broken. It is the chief object of the present invention to obviate these disadvantages.

According to this invention the end of the valve or pipe connection on the tank is provided with a conical, conoidal or similarly shaped opening and on the end of the pump barrel or nozzle is fitted an end piece having preferably a hemispherical end which, when the parts are to be connected together to force air into the tank, rests in the opening in the end of the pipe on the tank and so forms a sufficiently tight joint to prevent leakage.

When the operator withdraws the plunger of the pump, there is then no pressure of air tending to escape from the tank, and the specially shaped end of the pump is merely held in the recess in the pipe. When, however, on the return stroke, the operator forces the plunger inward to expel the body of air in the pump and force it into the tank, the pressure which is exerted by the operator is transmitted by the air in the pump to the specially shaped end which is thus forced firmly into contact with the conical recess making an air-tight joint.

The valve connection on the pump is provided with the usual check valve to prevent the escape of air, so that the liability of air escaping at the joint only arises when the operator is forcing air from the pump into the tank, and the pressure exerted, as above described, is sufficient to avoid such leakage.

In addition to making a sufficiently tight joint, the formation of the pipe nozzle and the end part of the pump permits of a certain amount of flexibility in the connection, and in addition to being capable of instant application and detachment, the joint is not liable to wear out speedily, and there is no part of the connection that can be effected by the oil in the tank.

In addition to the check valve the connection on the tank is provided with a hand-operated valve, preferably a needle valve, which controls the air passage without depending on the check valve.

It is generally sufficient to form the tapering or conoidal recess integral with the valve connection, but it may be a separate part fixed to this in any con-

venient manner and the end part of the pump which rests in this recess may be attached to the end of the pump barrel in any suitable manner, or it may be integral with it.

Referring to the drawings wherein is shown in vertical section a joint constructed in accordance with this invention, one part of the joint is formed on a pump such as is used in motor cars for supplying air pressure to the petrol tank, the other part being constructed on the usual valve fitting or attachment on the tank.

In the example shown, the member having the semi-spherical portion A is attached to the pump while the conical member of the joint is formed on the valve attachment on the tank. The pump C is provided at its delivery end with a nozzle attachment A^1 having an outlet opening A^2 and on this member is formed the semi-spherical part A of the joint, the air being forced through the nozzle by the operation of the piston C^1 actuated by the rod C^2.

The conical recess B is formed at the inlet of the valve box D which is screwed into the tank at the part D^1; the passage in the valve box is automatically closed by a ball valve E and the opening of this valve is controlled by a screw cap having an extension E^1 as shown.

In addition to the check valve E there is provided the needle valve F which operates in the usual manner.

The joint A B, in addition to affording a fluid-tight joint, permits of a certain amount of flexibility so that the pump can be moved relatively to the valve box without causing injury to the parts, and as no screwing or the like is necessary, the connection can readily and quickly be made and the pump again detached when desired.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In a joint of the kind described the combination of a conical or conoidal recess on one part co-operating with a spherical projection on the other part.

2. The combination with the valve fitting of a fuel tank having a conical or conoidal inlet opening B of a hand operated air pump having a spherical nozzle A substantially as and for the purpose described.

Dated this 21st day of December, 1904.

BOULT, WADE & KILBURN,
Agents for the Applicant.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1905.

[fol. 532] IN UNITED STATES DISTRICT COURT

STATEMENT MADE BY JUDGE ANDERSON ON MAY 25, 1928, IN THE SUIT BROUGHT BY THE BASSICK MANUFACTURING COMPANY AGAINST THE R. M. HOLLINGSHEAD COMPANY IN THE DISTRICT COURT OF THE UNITED STATES, WESTERN DISTRICT OF TENNESSEE, WESTERN DIVISION

Judge Anderson: Mr. Williams, I have heard very full argument on this matter from all sides. I know just as much about this case now as I will ever know.

Now Judge Burch in regard to the defense of res adjudicata, I do not think there is anything in that, because the hearing in New Jersey was not on the merits.

As to the monopoly feature that has been stressed, that is interesting, but I do not think it has any proper place in this case. This is a matter for an anti-trust suit. If it is an effort on the part of this concern to monopolize the grease business and monopolize it in an unlawful manner, there is a proper proceeding. I do not think that has anything to do with the issues in a patent case.

I have been thinking since yesterday about the position taken by Judge Thacher in New York, but frankly I do not agree with him. I think the authorities are such that to say the least it does not incline me to disturb the line of opinions which have been laid down, and particularly by my own Circuit. So while I am interested in the argument and would like it to continue, I think I have got the matter before me and have given everybody an opportunity, and I see no necessity for writing an opinion, because it would add nothing to the mass of literature which has already been written on this subject. The opinion which will finally be rendered on this case necessarily will be written at Cincinnati, and written by a Court that is unusually expert in patent matters. I think though that the decision in the Lyman case binds the Court in this case. For that reason the temporary injunction may be made permanent. You may draw the decree.

[fol. 533] IN UNITED STATES DISTRICT COURT

DECREE—Entered May 25, 1928

This cause come on this day to be heard on the entire record herein and was argued by counsel and same having been considered by the court it is ordered, adjudged and decreed by the court as follows;

That the decree of dismissal (in the case of Bassick Manufacturing Company vs. Frank Miller Company, No. 2759 United States District Court, District of New Jersey) is not a decree on the merits in said cause and is, therefore, not a good defense or bar of this suit as res adjudicata.

That the report of the Standing Master on file herein be and the same is hereby in all respects confirmed.

That the temporary injunction hereinbefore issued be and the same is hereby made perpetual.

The- the cause be and it is hereby referred to the Standing Master to hear such evidence as may be offered by the parties and report therefrom what damages and/or profits if any, the plaintiff is entitled to recover because of the infringements of its patents by the defendant.

That the costs of this cause will abide the final decree to be made herein.

The defendants having prayed an appeal to the Circuit Court of Appeals for the Sixth Circuit, such appeal is hereby allowed upon the execution by defendants of bond with good and sufficient surety conditioned as required by law in the sum of $500.00.

The execution of the reference herein ordered will await the action of the appellate Court in the appeal herein allowed.

Enter.

H. B. Anderson, Judge.

[fol. 534] IN UNITED STATES DISTRICT COURT

ORDER DEFINING INJUNCTION—Filed June 23, 1928

Upon application of the defendant for a definition of the effect and scope of the injunction granted herein, it is ordered that said injunction prohibits the defendant from

selling and/or using a pump and hose of defendant's manufacture in connection with or attached to a genuine Alemite coupler of plaintiff's manufacture.

This order will be treated as part of the decree heretofore entered on May 25, 1928.

This 23rd day of June, 1928.

H. B. Anderson, Judge.

IN UNITED STATES DISTRICT COURT

INJUNCTION WRIT—Filed July 9, 1928

UNITED STATES OF AMERICA,
Western District of Tennessee,
Western Division, ss:

The President of The United States of America to the R. M. Hollingshead Company, Greeting:

Whereas; The Bassick Manufacturing Company, a citizen of Delaware, has filed on the equity side of the District Court of the United States for the Western District of Tennessee, Western Division, a bill of complaint against you, the said The R. M. Hollingshead Company, and has obtained an allowance for a perpetual injunction, as prayed for in the said bill and as set forth in the decree entered by the court;

Now, Therefore, we, having regard to the matters in the said bill contained, do hereby command and strictly enjoin and restrain you, the said The R. M. Hollinghshead Company, your officers, agents, employees, associates, and confederates, from making, using, and/or selling any of [fol. 535] the forms or parts of the lubricating apparatus referred to in the decree of the court and particularly:

(a) Compressors of the type exemplified in Exhibit A of the affidavit of D. A. Beezley of April 12, 1926.

(b) Compressors of the handy shop type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926, and illustrated in the drawing Exhibit K of the affidavit of Ernest W. Davis of October 21, 1926.

(c) Couplers of the type exemplified in Exhibit A submitted with the affidavit of D. A. Beezley of April 12, 1926,

and illustrated in the drawing Exhibit J of the affidavit of Ernest W. Davis of October 21, 1926.

(d) Couplers of the type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926, and as illustrated in the drawing Exhibit K of the affidavit of Ernest W. Davis of October 21, 1926.

(e) Compressors and couplers of the Rogers type having a key hole slot and stepped cam member and sealing gasket exemplified in defendant's Exhibit A and illustrated in defendant's Exhibit chart No. 1 submitted to the Master appointed by the court herein.

(f) Compressors and defendant's proposed coupler of the type having a screw operated and leather faced sealing member adapted for advancement and retraction within a hollow bayonet slotted coupling member, exemplified in defendant's Exhibit B and as illustrated in defendant's Exhibit chart No. 2 submitted to the Master appointed by the court herein.

(g) Compressors and couplers of the Larkin type having a screw threaded and leather faced sealing member adapted for advancement and retraction within a hollow bayonet slotted coupling member, exemplified in defendant's Exhibit F, and as illustrated in defendant's Exhibit chart No. 3 submitted to the Master appointed by the court herein.

(h) Lubricant compressors and Zerk adapters of the type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926.

And/or any other device or devices embodying the inventions described and claimed in claims 1, 2, 3, 4, 5, 6, 8, 14 and/or 15 of Gullborg patent No. 1,307,734, and/or claims 2, 3 and/or 5 of Zerk patent No. 1,475,980 and/or any of the parts thereof, and/or any other device or devices adapted for use in systems or combinations embodying the same, either for original equipment or for replacement under the guise of "repairs" or otherwise, and from offering or advertising so to do, and from aiding or abetting or in any way contributing to the infringement of the said [fol. 536] claims of the said patents, or either of them.

Which commands and injunctions you are respectfully required to observe and obey until our said District Court shall make further order in the premises.

Wherein, fail not under the penalty of the law thence ensuing.

Witness the Honorable Harry B. Anderson, Judge of the District Court of the United States, this 5th day of July, A. D. 1928, and of the independence of the United States of America the 152nd year.

A. G. Mathews, Clerk, United States District Court, by W. L. McKinney, Chief Deputy Clerk, U. S. District Court W. D. T., Memphis, Tenn.

Marshall's Return

This writ came to hand at Memphis, Tennessee, and same was executed as herein commanded by reading to and leaving a copy of same with the within R. M. Hollingshead Company (L. B. Shipp, President of said company accepted service for said company).

This the 5th day of July, 1928, Memphis, Shelby County, Tennessee.

Arthur Rogers, U. S. Marshal, by W. R. Wright, Deputy Marshal.

7-5-28.

St. car fare in serving, 14 cents.

[fol. 537] In United States District Court

Petition for Appeal—Filed June 23, 1928

To the Honorable Harry B. Anderson, District Judge:

The above named The R. M. Hollingshead Company feeling aggrieved by the decree rendered and entered in the above entitled cause on the 25th day of May, 1928 and the further decree of June 23, 1928, does hereby appeal from said decrees to the Circuit Court of Appeals for the Sixth Circuit for the reasons set forth in the assignment of errors filed herein and it prays that its appeal be allowed and that citation be issued as provided by law, and that a transcript of the record proceedings and documents, and the exhibits, upon which said decree was based, duly authenticated, be

sent to the United States Circuit Court of Appeals for the 6th Circuit, sitting at Cincinnati, Ohio, under the rules of said court in such cases made and provided.

And your petitioner prays that the proper order relating to the required security to be required of it be made.

The R. M. Hollingshead Company, by Weidersheim & Fairbanks, Burch, Minor & McKay, Jno. B. Keeble, Solicitors.

Appeal allowed as prayed for upon bond being given as required by law for the sum of $500.00. This 23rd day of June, 1928.

H. B. Anderson, Judge.

IN UNITED STATES DISTRICT COURT

ASSIGNMENT OF ERRORS—Filed June 23, 1928

Now comes the defendant in the above entitled case, The R. M. Hollingshead Co., and says that in the record, proceedings and decree of this Court entered in the above [fol. 538] entitled cause on May 25th, 1928 there is manifest error in this, to-wit:

1. The Court erred in sustaining the bill of complaint and ordering a decree in conformity to the prayers of the bill.

2. The Court erred in entering the said decree of May 25th, 1928.

3. The Court erred in holding claims 1, 2, 3, 4, 5, 6 and 8 of Gullborg Patent No. 1,307,734 valid.

4. The Court erred in holding claims 14 and 15 of the Gullborg Patent No. 1,307,734 valid.

5. The Court erred in holding that defendant's manufacture, sale and/or use of grease dispensing pumps or compressors equipped with bayonet type of conduit couplers of the type and character illustrated in Plaintiff's Exhibit "K" accompanying the affidavit of Ernest W. Davis, and also exemplified in Defendant's Exhibits Nos. 6-C and 8-C, constitutes either direct infringement and/or contributory

infringement of claims 1, 2, 3, 4, 5, 6, 8, 14 and/or 15 of the Gullborg Patent No. 1,307,734.

6. The Court erred in holding in confirmation of the Master's report and in overruling defendant's exceptions thereto, that the manufacture, sale and/or use by defendant of grease dispensing pumps or compressors equipped with bayonet type of conduit couplers of the type and character exemplified by Defendant's Exhibits "A", "B" and "F" before the Master, constitutes contributory infringement of claims 14 and/or 15 of the Gullborg Patent No. 1,307,734.

7. The Court erred in holding claims 2, 3 and 5 of the Zerk Patent No. 1,475,980 valid.

8. The Court erred in holding that the defendant's manufacture, sale and/or use of grease dispensing pumps or compressors equipped with cone type of contact nozzles or discharge orifices of the type exemplified by Defendant's Exhibit No. 45, constitutes contributory infringement of claims 2, 3 and/or 5 of the Zerk Patent No. 1,475,980.

9. The Court erred in enjoining the defendant from making, selling and/or using any old and unpatented device adapted for use in systems or combinations embodying the invention of the Gullborg Patent No. 1,307,734 and/or the invention of the Zerk Patent No. 1,475,980 and manufactured by the plaintiff.

10. The Court erred in holding that the manufacture, sale and/or use of any old and unpatented grease dispensing pump or compressor having any old and unpatented bayonet type of conduit coupler thereon for connection [fol. 539] with grease cups manufactured and sold by plaintiff according to the Gullborg Patent No. 1,307,733, constitutes contributory infringement of claims 14 and 15 of the Gullborg Patent No. 1,307,734.

11. The Court erred in holding that the manufacture, sale and/or use of any old and unpatented grease dispensing pump or compressor having any old and unpatented contact type of discharge nozzle thereon for connection with certain unpatented grease cups of the general type disclosed in Figure 3 of Zerk Patent No. 1,475,980, manufactured and sold by plaintiff, constitutes contributory infringement of claims 2, 3 and 5 of the Zerk Patent No. 1,475,980.

12. The Court erred in not adjudging plaintiff to have violated the spirit, intent and terms of the Clayton Act (38 Stat. 731; U. S. Comp. Stat., Sec. 8835c).

13. The Court erred in enjoining the defendant from selling any old and unpatented pump and hose for the purpose of dispensing grease, equipped with the bayonet type of coupler manufactured and sold by the plaintiff according to the Gullborg Patent No. 1,307,734 in suit, and which plaintiff's product defendant purchased on the open market, contrary to the recommendation implied in the Master's report, ordered approved, to-wit:

"I am further ready to agree with the concluding paragraph of the reply brief that it is no infringement to furnish a 'compressor' minus a 'coupler,' in other words, the pump and hose elements adapted to receive a Gullborg alemite coupler of plaintiff's manufacture. These two devices are public property; * * *."

14. The Court erred in holding and adjudging that the final decree of dismissal in the case of Bassick Manufacturing Company vs. Frank Miller Company, No. 2759 United States District Court, District of New Jersey, was not a decree on the merits or a final decree in said New Jersey cause, and that said final decree of dismissal was therefore not a good defense or bar in this Court as res judicata.

15. The Court erred in finding the equities to be with the plaintiff and in awarding it an injunction, accounting and costs as prayed for in the bill.

16. The Court erred in making perpetual the temporary injunction heretofore granted herein.

17. The Court erred in decreeing that defendant be enjoined from issuing and/or selling defendant's pump and [fol. 540] hose in connection with or attached to a genuine Alemite coupler of plaintiff's manufacture.

Wherefore, and for the diverse other errors in the record, proceedings and decree of the Court in this cause appearing, said defendant prays that the decree entered herein on the 25th day of May, 1928, be reversed.

Leonard L. Kalish, E. Hayward Fairbanks, Counsel for Defendant-Appellant.

IN UNITED STATES DISTRICT COURT

ORDER FOR APPEAL—Filed April 20, 1927

Now comes the defendant, the R. M. Hollingshead Company, and prays the Court to be allowed to appeal from the order granting a preliminary injunction made in this cause on the 21st day of March, 1927, and asks that the Court fix the amount of bond to be given by the defendant, and also to fix the time in which the transcript of the record shall be prepared by and presented to the Court, together with assignments of error.

And thereupon, the Court having considered the application of the defendant, the defendant is allowed to appeal from the order granting a preliminary injunction, entered March 21st, 1927, upon giving an appeal bond in the sum of $1,000.00, with security to be approved by the Clerk.

Thirty days allowed for the preparation of the record and for filing assignments of error.

All of which is ordered, adjudged and decreed this 20th day of April, 1927.

To all of which the plaintiff excepts.

H. B. Anderson.

[fol. 541] Bond on Appeal for $500.00, approved and filed June 23, 1928, omitted in printing.

[fol. 542] Citation in usual form omitted in printing.

[fol. 543] IN UNITED STATES DISTRICT COURT

PLAINTIFF'S PETITION FOR CROSS APPEAL—Filed June 23, 1928

To the Honorable Harry B. Anderson, United States District Judge:

The above named plaintiff, The Bassick Manufacturing Company, conceiving itself aggrieved by the decree entered in the above entitled cause on the 25th day of May 1928, does hereby appeal from the said decree to the United States Circuit Court of Appeals for the Sixth Circuit, for

the reasons specified in the Assignment of Errors filed herein and herewith; and it prays that this appeal may be allowed and that a citation issue as provided by law and that a transcript of the record, proceedings, papers and exhibits upon which said decree was made and passed, duly authenticated, may be sent to the United States Circuit Court of Appeals for the Sixth Circuit.

The Bassick Manufacturing Company, by Lowell W. Taylor, Williams, Bradbury, McCaleb & Hinkle, Solicitors and Counsel.

IN UNITED STATES DISTRICT COURT

[Title omitted]

ASSIGNMENT OF ERRORS—Filed June 23, 1928

Now comes The Bassick Manufacturing Company, the [fol. 544] plaintiff in the above entitled cause, by its solicitors and counsel, and he[illegible]des the following Assignment of Errors upon which it [illegible] rely, and says that the decree entered and filed herein on the 25th day of May 1928, is erroneous and unjust and against the just rights of the plaintiff, for the following reasons, viz:

(1) The court erred in confirming the report of the Standing Master herein insofar as it states in paragraph 4 of Part V that:

"This device (the Exhibit F coupler submitted by the defendant) is identical in structural characteristics with the other two couplers submitted and should be classed as a solid gasket' and 'screw-thread union.' "

The phrases thus quoted by the master are taken from the opinion of the Sixth Circuit Court of Appeals in Lyman v. Bassick and the allied cases referred to in the master's report. The "solid gasket" and "screw-thread union" referred to in the said opinion of the Sixth Circuit Court of Appeals was exemplified by plaintiff's Exhibits No. 107, No. 112 and No. 126 in the case of The Bassick Manufacturing Company v. The O. K. Manufacturing Company and was and is of a class having quite different structural characteristics than the Exhibit F or other

couplers submitted by the defendant herein. The "screw-thread" and "gasket union" to which the opinion of the Sixth Circuit Court of Appeals referred saying that "one of the defendants tried to (use it) but gave it up, and adopted the secondary sliding element giving the automatically adjustable intensive seal" was, as shown by the aforesaid Exhibits, of a kind in which the fitting was externally screw threaded and in which the coupler was interiorly screw threaded so that the coupler was attached to the fitting by screwing the female threads of the coupler over the male threads of the fitting. It was this construction which the opinion of the Court of Appeals referred to as "a screw-thread and gasket union" and which one of the defendants tried to use but gave it up and adopted the secondary sliding element which gives the automatically adjustable intensive seal.

The same error underlies and is incorporated in the following statement appearing on page 39 of the master's report:

"The coupler referred to was of the 'screw-thread and [fol. 545] gasket union' type, identical, or at least similar to the type of coupler introduced before me. And I may add that I have so considered it throughout the entire hearing and this report. I do not think that counsel for plaintiff is justified on the record of that case, so far as pointed out to me by counsel and examined, in seeking to differentiate the coupler devices introduced before me. Of course, the coupler is not physically exhibited, nor have counsel pointed out an illustration of it, but I hold that the reference of Judge Denison was to a coupler device at least similar in principle to that exhibited herein."

(2) The court erred in confirming the report of the Standing Master herein insofar as it states in paragraph 4 of Part VI:

"In the opinion of Judge Denison the patentable novelty of Gullborg's patent form of pin fitting was held to be that the pin which furnished bearings for the slot was made to pass through the fitting and furnish an abutment for the valve closing spring; that it is only that complete combination that can be patentable."

whereas, the statement of the opinion of the Sixth Circuit Court of Appeals was:

"We see no reason for denying the patentable novelty of Gullborg's particular form of fitting, by reason of which it has come to be called a pin fitting, and by which the same pin which furnished bearings for the slot was made to pass through the fitting and furnish an abutment for the valve closing spring; but it is only this complete combination that can be patentable; when the pin becomes mere arms projecting from each side, and the spring abutment is otherwise furnished, we have only the already common bayonet joint member."

(3) The court erred in approving the report of the Standing Master herein insofar as it says in paragraph 5 of Part VI, relative to defendant's Exhibit C fitting and to the fitting of the Gullborg patent in suit, that:

"The functions performed by the two are identical and they are equivalent. In view of the fact, however, [fol. 546] that the Gullborg patent has been limited to the use of the transverse pin as the spring abutment I find, as a matter of fact, that defendant's Exhibit C is not an infringement of the Gullborg patent,"

whereas, the Gullborg patent was not and has not been limited to the use of the transverse pin as the spring abutment. Furthermore, the defendant's Exhibit C fitting is, as stated in the above quoted portion of the master's report, an equivalent and performs identical functions. It is, therefore, an infringement at least in the sense employed by the master in stating his conclusion that "defendant's Exhibit 'C' is not an infringement of the Gullborg patent."

(4) The court erred in approving the report of the Standing Master herein insofar as the master states in paragraph 4 of part XIX that:

"I am ready to agree that so construed a very broad, in fact much too broad, scope is given, in my opinion, to claims 14 and 15,"

whereas, the construction referred to as required by the rule of law enunciated by the United States Supreme Court in Leeds & Catlin v. Victor, 213 U. S. 301, and by the Sixth Circuit Court of Appeals in Lyman v. Bassick, 18 Fed. (2) 29, does not give too broad a scope to claims 14 and 15 of Gullborg Patent 1,307,734.

(5) That the court erred in failing to disapprove the report of the Standing Master insofar as the parts upon which error is assigned in paragraphs 1, 2, 3 and 4 herein are concerned.

(6) That the court erred in decreeing that the costs of this cause abide the final decree to be made herein.

(7) That the court erred in failing and refusing to award the costs to the plaintiff and against the defendant.

Williams, Bradbury, MacCaleb & Hinkle, Solicitors and Counsel for The Bassick Manufacturing Company.

[fol. 547] IN UNITED STATES DISTRICT COURT

ORDER ALLOWING CROSS APPEAL—Filed June 23, 1928

This day came the parties by their solicitors and counsel, and, on motion of the solicitors and counsel for The Bassick Manufacturing Company, plaintiff, it is

Ordered as follows: That a cross appeal, to the United States Circuit Court of Appeals for the Sixth Circuit, from the decree of this court entered and filed herein on May 25, 1928 be and the same is hereby allowed, and that a citation issue as provided by law, and that so much of the transcript of record herein as is necessary and essential to a proper presentation thereof be forthwith transmitted to the said United States Circuit Court of Appeals, and it is further

Ordered, that the bond on appeal be fixed in the sum of Two Hundred and Fifty Dollars ($250.00).

H. B. Anderson, United States District Judge.

Bond on cross appeal for $250.00, approved and filed June 23, 1928, omitted in printing.

[fol. 548] Citation in usual form showing service on Chas. W. Burch, filed June 23, 1928, omitted in printing.

[fol. 549] IN UNITED STATES DISTRICT COURT

Orders Extending Time

ORDER—Filed June 23, 1928

Came the parties by their solicitors and defendant filed its petition for appeal, its assignment of errors, appeal bond and citation, whereupon said appeal is allowed and said appeal bond approved by the court and said citation signed by the Judge of the Court and accepted by the solicitor for plaintiff.

Upon application by the defendant the time for the preparation and settling the record on appeal and complying with General Equity Rule 75 and Rule 15 of the Sixth Circuit is extended for 60 days from this date.

This 23rd day of June, 1928.

H. B. Anderson, Judge.

[fol. 550] ORDER—Filed July 30, 1928

In this cause upon application of the defendant it is ordered that the defendant may have until September 8, 1928, to file its præcipe.

Enter. H. B. Anderson, Judge.

O.K.: Chas W. Burch, for Deft. Lowell W. Taylor for Plff.

ORDER—Filed Aug. 28, 1928

In this cause upon application by the defendant the time for the preparation and settling of the record on appeal, for filing the condensed record on appeal and complying with General Equity Rule No. 75 and Rule 15 of the United States Circuit, is extended for thirty (30) days from this date.

Ordered this August 24, 1928.

H. B. Anderson, Judge.

O. K.: Lowell W. Taylor, for Plaintiff. Minor, for Deft.

[fol. 551] ORDER—Filed Oct. 17, 1928

In this cause for good and sufficient reasons to the court appearing, it is ordered that the time for preparation and

settling of the record on appeal for filing præcipe or supplemental præcipe, for filing condensed record on appeal and for complying with General Equity Rule No. 75 and Rule 15 of United States Circuit Court of Appeals for the 6th Circuit, is extended to November 20, 1928.

It is further ordered that this order is entered nunc pro tunc as of September 22, 1928, and that the provisions hereof shall inure to the benefit of both the plaintiff and the defendant.

Enter.

H. B. Anderson, Judge.

Minor, for Deft. Lowell Taylor, for Plff.

ORDER—Filed Nov. 16, 1928

In this cause for good and sufficient reasons to the Court appearing, it is ordered by the court that the time for preparation and settling of the record on appeal for filing præcipes or supplemental præcipes, for filing condensed record on appeal and for complying with General Equity Rule No. 75 and Rule 15 of the United States Circuit Court of Appeals for the Sixth Circuit, is extended to December 20, 1928.

It is further ordered that the provisions of his order shall inure to the benefit of both plaintiff and defendant.

H. B. Anderson, Judge.

[fol. 552] IN UNITED STATES DISTRICT COURT

ORDER FILING TRANSCRIPT OF EVIDENCE—Filed Nov. 17, 1928

It appearing to the court that on the trial of this cause there was no official court reporter appointed by the court as provided for in Federal Equity Rule No. 50, but it further appearing to the court that the evidence offered and proceedings had were reported and a transcript of the same being today presented to the court and having been examined and found to be correct:

It is therefore ordered, adjudged and decreed that said transcript of the evidence offered and the proceedings had in the trial of this cause on the dates indicated in said transcript be and the same is hereby ordered to be filed in the Clerk's Office for the use of either party to said cause.

Enter.

H. B. Anderson, Judge.

IN UNITED STATES DISTRICT COURT

ORDER RE FILING OF PRÆCIPES—Filed Nov. 27, 1928

This cause having come on to be heard upon application for leave to file plaintiff's supplemental præcipe for the record on appeal and cross appeal, a præcipe for transcript of record on cross appeal having been filed by the plaintiff on July 23, 1928, and a præcipe for transcript of record on appeal having been filed by defendant on September 22, 1928, plaintiff's proposed supplemental præcipe withdrawing the præcipe originally filed by it on July 23, 1928, and adopting the defendant's præcipe filed September 22, 1928, it is

Ordered: That plaintiff have leave to file the accompanying plaintiff's supplemental præcipe instanter and the said defendant's præcipe and plaintiff's supplemental præcipe are approved as setting forth the evidence upon which the decree of the court dated May 25, 1928, was entered and [fol. 553] from which the appeal and cross appeal now pending was taken.

It is further ordered that the original copies of papers and exhibits enumerated in the defendant's præcipe and the plaintiff's supplemental præcipe may be transmitted to the clerk of the court of appeals for the sixth circuit for printing.

H. B. Anderson, United States District Judge.

IN UNITED STATES DISTRICT COURT

PRÆCIPE FOR TRANSCRIPT OF RECORD ON APPEAL—Filed Sept. 22, 1928

To the Clerk of the said Court:

Please prepare a transcript of the record in the above entitled cause, to be filed in the United States Circuit Court of Appeals for the Sixth Circuit, pursuant to an appeal allowed the defendant in the above cause and a cross appeal allowed the plaintiff in the same cause, and to include in such transcript of record the following papers, pleadings, depositions, documents and exhibits.

It is requested that the record on appeal consist of the following items, certain of them to be printed and others to be certified as physical exhibits as indicated:

To be printed:

1. Bill of Complaint.
2. Defendant's Answer.
3. Amended Bill of Complaint.
4. Defendant's Answer to Amended Bill of Complaint.

Parts of Plaintiff's Record on Final Hearing

5. Affidavit of D. A. Beezley executed April 12, 1926, together with paper exhibits comprising:
   Exhibit "B"—Order.
   Exhibit "C"—Invoice.

[fol. 554] Exhibit "D"—Delivery Ticket.

6. Affidavit of O. A. Cumming, executed September 13, 1926, together with
   Exhibit "B"—Instruction Sheet.
   Exhibit "C"—Invoice.
7. Order of court allowing defendant leave to amend its answer.
8. Amendment to answer filed by defendant.
9. Order for preliminary injunction, entered March 21, 1927.
10. Order modifying preliminary injunction order, entered April 20, 1927.
11. Petition of defendant for leave to use new devices for couplers on grease gun and pin fittings in lieu of coupler and pin fittings claimed to infringe Alemite fittings and coupler used by plaintiff.
12. Order of Reference to Master, entered April 20, 1927.
13. Supplemental petition of defendant for leave to use new devices for couplers on grease gun and pin fittings in lieu of coupler and pin fittings claimed to infringe Alemite fittings and coupler used by plaintiff.
14. Writ of injunction served on defendant by the Marshal's office.
15. Report of Standing Master.

16. Plaintiff's exceptions to the report filed October 15, 1927, by the Standing Master on Order of Reference of April 20, 1927.
17. Defendant's exceptions to the Master's report filed October 15, 1927.
18. Amendment to answer filed on or about April 21, 1928.
19. Defendant's motion to dismiss Bill of Complaint, together with the affidavit of Charles F. Lynch in support thereof, and certified copies filed therewith of certain portions of the record and proceedings in the cause of The Bassick Manufacturing Company vs. Frank Miller Co., Equity No. 2759, in the United States District Court, District of New Jersey.
20. Stipulated testimony of J. E. Otis, Jr. and the following exhibits offered in connection therewith:

Exhibit "I"—Drawing of Alemite and various infringing constructions,
Exhibit "I"—Drawing of O. K. rubber gasket and screw type and rubber gasket couplers,
Exhibit "J"—Petition for rehearing Larkin and O. K. Cases,

[fol. 555] Exhibit "K"—Supplemental petition for rehearing Larkin and O. K. Cases,
Exhibit "L"—Petition to Supreme Court for certiorari in Larkin and O. K. cases,
Exhibit "M"—Drawing of Larkin compressor, coupler and pin fitting involved in Larkin-Chicago case,
Exhibit "O-3"—Drawing of Larkin coupler,
Exhibit "O-4"—Drawing of Larkin coupler,
Exhibit "O-6"—Drawing of Larkin coupler submitted by Sawitoski and referred to in order of May 27, 1927,
Exhibit "Q"—Drawing of lubricant compressor of type involved in Motor Parts Station case,
Exhibit "AA"—Photograph of White Company grease ejector,
Exhibit "BB"—Drawing of White Company grease ejector and shackle bolt.

21. Condensed statement of evidence of defendant's following named witnesses, produced by depositions taken under R. S. 863, and notice of taking of depositions:

Hugo C. Gibson,
Clifford L. Jones,
Louis Nucho,
Roderick N. Smith,
Harold A. Southgate,
Clifford L. Jones.

22. Condensed statement of evidence, produced at the trial, covering the testimony of the following witnesses:

For Plaintiff

John M. McGreggor,
Albin C. Ahlberg,
O. A. Cummings.

For Defendant

L. B. Shipp.

23. Plaintiff's exhibits offered at the trial as follows:

Exhibit 2—Affidavits dated Feb. 27, 1927, filed by the defendant in the case of Bassick vs. Frank Miller in opposition to plaintiff's motion to dismiss without prejudice.

Exhibit 4—Certified copy of disclaimer of Claim 12 of Gullborg 1,307,734.

Exhibit 15—Exhibit "J" drawing Davis affidavit,

[fol. 556] Exhibit 16—Exhibit "K' drawing Davis affidavit,

Exhibit 20—Certain proceedings and papers in the case of Bassick vs. Frank Miller, including:

Plaintiff's motion for an Order explaining and supplementing the Order of Feb. 28, 1928,

Notice of said motion acknowledged May 12, 1928,

Memorandum of the Court filed May 22, 1928,

Plaintiff's petition for appeal,

Order allowing appeal,

Assignment of Errors.

Patents In Suit

24. Arthur V. Gullborg, No. 1,307,734, June 24, 1919.
25. Oscar Zerk, No. 1,475,980, Dec. 4, 1923.

Patents, Publications, Drawings and Documentary Exhibits Offered by Defendant with Respect to Gullborg Patent in Suit

27. Sholder, No. 242,564, June 7, 1881.
28. Stedman, No. 456,295, July 21, 1891.
29. Lees, No. 610,359, Sept. 6, 1898.
30. Barcus, No. 1,117,762, Nov. 27, 1914.
31. Winkley, No. 1,201,414, Oct. 17, 1916.
32. Winkley (Reissue), No. 14,667, June 10, 1919.
33. Gullborg, No. 1,307,733, June 24, 1919.
34. Seng, No. 1,322,357, Nov. 18, 1919.
35. Murphy, No. 1,637,326, July 26, 1927.
36. Seng (British), No. 3,028, Feb. 24, 1915.
37. Alley (British), No. 21,893, 1906.
38. Grey (British), No. 18,727, 1912.
39. Sharpe (British), No. 26,134, of 1912.
40. Seng (French), No. 20,083.
41. Translation of French Seng patent No. 20,083 (being defendant's Exhibit No. 32).
42. Seng (French), No. 468,869.
43. French publication in the magazine "Omnia" of April 25, 1914.
44. Translation of the French publication "Omnia" (being defendant's Exhibit No. 22).
45. Drawing of defendant's coupler (being defendant's Exhibit No. 9).
46. Drawing of vacuum testing apparatus (being defendant's Exhibit 10).

[fol. 557] 47. Drawing of reduced Barcus model coupler (being defendant's exhibit 15).

48. Drawing of Alley's device (being defendant's exhibit No. 19).
49. Drawing of Seng's devices of the British, French and U. S. Seng patents and the Seng publication in Omnia, (being defendant's Exhibit No. 35).
50. Drawing of O. K. Screw type coupler and hose (being defendant's exhibit No. 58).

51. Sales receipt of Alemite Lubricator Co. for one set of Alemite pin fittings or grease cups for 1925. Essex automobile (being defendant's exhibit No. 59).
52. Invoice of Dot Lubricator Co. for Dot adapters sold to Hollingshead Co. (being defendant's exhibit No. 65).
53. Invoice of Dot Lubricator Co. for Dot adapters sold to Hollingshead Co. (being defendant's exhibit No. 66).
54. Invoice of Alemite Lubricator Co. for 500 pin fittings or grease cups sold to the Hollingshead Co. (being defendant's exhibit No. 67-A).
55. Invoice of Alemite Lubricator Co. for 100 Alemite pin fittings or grease cups sold to the Hollingshead Co. (being defendant's exhibit No. 67-B).
56. Cover page and page 6 of the Alemite publication "Directions for Using the Alemite High-Pressure Lubricating System" (being defendant's Exhibit No. 75).
57. Notice of the Carr Fastener Co. relative to its withdrawal of the Dot lubricating system from the automotive field (being defendant's exhibit No. 76).

Patents, Publications, Drawings and Documentary Exhibits Offered by Defendant With Respect to the Zerk Patent in Suit

58. Hay and McIntyre, No. 499,541, June 13, 1893.
59. Crotty, No. 1,400,871, Dec. 20, 1921.
60. Manzel, No. 1,459,662, July 19, 1923
61. Wallace, No. 1,494,652, May 20, 1924.
62. Wallace (Reissue), No. 16,787, Nov. 22, 1927.
63. Clarkson (Brit.), No. 6,940, 1904.
64. Enlarged drawing of Figure 3 of Zerk patent in suit (being defendant's Exhibit No. 46).
65. Enlarged drawing of defendant's cone type contact nozzle and plaintiff's commercial Zerk type nipple (being defendant's Exhibit No. 47).
66. Sales receipt of the Alemite Lubricator Co. for pur-
[fol. 558] chase of Zerk type nipples or grease cups (being defendant's Exhibit No. 62).
67. Transcript of oral opinion of Judge Anderson, rendered on May 25, 1928.
68. Decree entered May 25, 1928.

69. Supplemental order of June 23, 1928, to be treated as part of the decree entered on May 25, 1928.
70. Injunction writ, dated July 5, 1928.
71. Defendant's petition for appeal.
72. Defendant's assignment of errors.
73. Order allowing defendant's appeal.
74. Defendant's cost bond on appeal.
75. Citation on appeal.
76. Plaintiff's petition for cross appeal.
77. Order allowing cross appeal.
78. Plaintiff's assignment of errors.
79. Cost bond on cross appeal.
80. Citation on cross appeal.
81. Order extending time in which to print and file record on appeal.
82. This præcipe.

Request is also hereby made that you certify and transmit to the Circuit Court of Appeals for the Sixth Circuit, the following items as physical exhibits:

Plaintiff's Exhibits

83. Exhibit "A" of affidavit of D. A. Beezley—service compressor.
84. Exhibit "A" of affidavit of O. A. Cummings—shop compressor, together with metal hose, bayonet coupling, and Zerk adapter.
85. The following exhibits offered in connection with the stipulated testimony of J. E. Otis, Jr.:
    Exhibit "A"—Alemite lubricant compressor,
    Exhibit "B"—Assortment of Alemite pin fittings,
    Exhibit "C"—Plaintiff's Alemite Manual,
    Exhibit "D"—Plaintiff's publication "How to Get More Alemite Business",
    Exhibit "E"—Plaintiff's Alemite and Alemite-Zerk price list,
    Exhibit "F"—Plaintiff's publication "Alemite Products",
    Exhibit "G"—Copies of title papers to Gullborg and Zerk patents,
    Exhibit "H"—Volume III of Adjudication Book,
[fol. 559] Exhibit "N"—Copy of Larkin 1926 catalogue constituting Exhibit 154 in Larkin-Chicago case,

Exhibit "O-1"—Larkin 1927 catalogue referred to in May 27, 1927 order for preliminary injunction,
Exhibit "O-2"—Larkin Miniature catalogue,
Exhibit "O-5"—Lubricant compressor and coupler like Exhibit "G" Sawitoski affidavit referred to in order of May 27, 1927 in Larkin-Chicago case,
Exhibit "P"—Larkin 1927 catalogue referred to in Preliminary Injunction Order of December 5, 1927 in Larkin-Chicago case,
Exhibit "P-1"—Larkin lubricant compressor and coupler of so-called small diameter type.

86. The following exhibits offered by plaintiff at the trial:
Exhibit 9—Assortment of Alemite-Zerk fittings,
Exhibit 10—Alemite-Zerk compressor,
Exhibit 11—Alemite Handy-Shop compressor,
Exhibit 12—Alemite H-15 Service compressor,
Exhibit 13—Alemite P-25 Service compressor,
Exhibit 14—Alemite-Zerk adapters for Alemite Handy-Shop compressor, Alemite H-15 compressor and Alemite P-25 compressor,
Exhibit 17—Suction demonstration apparatus,
Exhibit 18—A to J inclusive—O. K. case exhibits.

Defendant's Exhibits

87. Exhibit No. 3—"Parts Price List" accompanying the Alemite compressor (Exhibit 2).
88. Exhibit No. 4—Instructions for using H-15 compressor.
89. Exhibit No. 5—Alemite grease cup or pin fitting of The Bassick Mfg. Co.
90. Exhibit No. 6—Defendant's No. 20 "Whiz" hand compressor including:
Pump, 6-A.
Hose, 6-B.
Coupler, 6-C.
91. Exhibit No. 6-A—Pump forming part of defendant's hand compressor (Exhibit 6).
92. Exhibit No. 6-B—Flexible metallic hose forming part of defendant's hand compressor (Exhibit 6).
93. Exhibit No. 6-C—Bayonet coupler forming part of defendant's hand compressor (Exhibit 6).
[fol. 560] 94. Exhibit No. 6-CC—Sectional sample of defendant's coupler 6-C.

95. Exhibit No. 7—Alemite screw type of hand compressor of the Bassick Mfg. Co. including:
    Pump, 7-A.
    Metallic Hose, 7-B.
    Alemite bayonet coupler, 7-C.
96. Exhibit No. 7-A—Screw type of hand pump forming part of (Exhibit No. 7).
97. Exhibit No. 7-B—Flexible metallic hose forming part of (Exhibit No. 7).
98. Exhibit No. 7-C—Plaintiff's Alemite bayonet coupler forming part of (Exhibit No. 7).
99. Exhibit No. 8—Defendant's large size service compressor including:
    Pump, 8-A.
    Metallic hose, 8-B.
    Coupler, 8-C.
    Tank, 8-D.
    Textile hose, 8-E.
100. Exhibit No. 8-A—Defendant's pump (reciprocating piston pump) part of defendant service compressor (Exhibit 8).
101. Exhibit No. 8-B—Flexible metallic hose comprising part of defendant's service compressor (Exhibit 8).
102. Exhibit No. 8-C—Coupler forming part of defendant's service compressor (Exhibit 8).
103. Exhibit No. 8-D—Lubricant reservoir or tank forming part of defendant's service compressor (Exhibit
104. Exhibit No. 8-E—Fabric hose forming part of defendant's service compressor (Exhibit 8).
105. Exhibit No. 11—Sample of defendant's coupler like 6-C fitting for vacuum test.
106. Exhibit No. 13—Full size model of Barcus coupler.
107. Exhibit No. 14—Reduced model of Barcus coupler to fit Gullborg Alemite grease cup.
108. Exhibit No. 16—Model of Stedman Patent Coupler.
109. Exhibit No. 20—Alley's lubricating System including:
    Pump, 20-A.
    Screw coupler nozzle, 20-B.
    Bayonet coupler nozzle, 20-C.
    Screw type of grease cup or lubricator, 20-D.
[fol. 561] Bayonet type of grease cup or lubricator, 20-E.

110. Exhibit No. 20-A—Alley's Grease Pump.
111. Exhibit No. 20-B—Alley's Screw Type Coupler Nozzle.
112. Exhibit No. 20-C—Alley's Bayonet Type of Coupler Nozzle.
113. Exhibit No. 20-D—Alley's Screw Type Grease Cup or Lubricator.
114. Exhibit No. 20-E—Alley's Bayonet Type of Grease Cup or Lubricator.
115. Exhibit No. 26—Model of Winkley's grease cup.
116. Exhibit No. 27—Lubricant dispensing compressor having hose coupler exemplifying Winkley's "Claw" type of coupling.
117. Exhibit No. 28—Letter from Librarian of General Motor Co., authenticating photostat of Omnia publication.
118. Exhibit No. 38—"Dot" grease compressor embodying Murphy patent construction.
119. Exhibit No. 39—"Dot" nipple or grease cup embodying Murphy patent construction.
120. Exhibit No. 40—A grease cup illustrating a mode of contracting bayonet type of valved lubricant receptacle.
121. Exhibit No. 40-A—Sectional model of (Exhibit 40).
122. Exhibit No. 41—Defendant's abandoned coupler construction of the key-hole type.
123. Exhibit No. 43-A—Cut away or sectioned duplicate of nozzle of Zerk gun or compressor.
124. Exhibit No. 44—Zerk nipple or grease cup.
125. Exhibit No. 44-A—Sample of cut away or sectioned Zerk nipple or grease cup.
126. Exhibit No. 45—Defendant's cone type of contact nozzle for use on Zerk nipple.
127. Exhibit No. 45-A—Cut away or sectioned sample of defendant's cone type of contact nozzle.
128. Exhibit No. 53—Model of Hay & McIntyre lubricating pump.
129. Exhibit No. 54—Model of Hay & McIntyre lubricant receptacle.
130. Exhibit No. 57—O. K. screw type of hose and coupler.
131. Exhibit No. 61—Zerk nipples or grease cups purchased from the Alemite Lubricator Co.

132. Exhibit No. 63—Picture of Hollingshead gear grease dispensing compressor or pump unit.

[fol. 562] 133. Exhibit No. 64—Dot adapter or connector by defendant with its chassis lubricator dispensing compressors of (Defendant's Exhibit No. 8).

134. Exhibit No. 68—Portfolio of Alemite advertisements.

135. Exhibit No. 69—Alemite advertisement in Saturday Evening Post, August 20, 1927 (photostatic reproduction).

136. Exhibit No. 70—Publication of the Bassick Co. entitled "Alemite Transmission Lubricant" (photostatic reproduction).

137. Exhibit No. 71—Publication of the Bassick Co. entitled "Why There Is a Few Cents Difference In Lubricants" (photostatic reproduction).

138. Exhibit No. 72—Publication of the Bassick Co. entitled "Industrial Opportunities" (photostatic reproduction).

139. Exhibit No. 73—Publication of the Bassick Co. entitled "Alemite High Pressure", June 1927 (photostatic reproduction).

140. Exhibit No. 74—Publication of the Bassick Co. entitled "Alemite-ing a Profitable Business."

—— ——, Counsel for Plaintiff.

Consented to by:

Leonard L. Kalish, E. Hayward Fairbanks, Counsel for Defendant.

IN UNITED STATES DISTRICT COURT

PLAINTIFF'S SUPPLEMENTAL PRÆCIPE—Filed Nov. 27, 1928

To the Clerk of the said Court:

An appeal having been allowed the R. M. Hollingshead Company and a cross appeal having been allowed The Bassick Manufacturing Company in the above entitled cause, and the plaintiff's having filed and served on July [fol. 563] 23, 1928 a præcipe for transcript of record on cross appeal, the defendant having filed a præcipe for transcript of record on appeal, the same having been filed on September 22, 1928, the plaintiff now withdraws its præ-

cipe filed on July 23, 1928 and adopts the præcipe filed by defendant on September 22, 1928, but requests that the same be supplemented as follows:

Please print:

Transcript of proceedings including condensed statement of evidence before the Master, incorporating the testimony of Hugh C. Gibson and John M. McGregor.

Plaintiff's Exhibit 1—Bassick Company motion to dismiss Miller Company case and affidavits of J. E. Otis, Jr., and Elwood Hansmann and exhibits submitted therewith.

Please transmit as physical exhibits the following exhibits offered by defendant before the Master:

Defendant's Exhibit A, B and F—couplers.
Defendant's Exhibit C and G—fittings.

Please also transmit as physical exhibits the following exhibits offered by plaintiff at the trial:

Plaintiff's Exhibit 6—Defendant's brief on question of infringement before the Master.

Plaintiff's Exhibit 7—Defendant's reply memoranda before the Master.

Plaintiff's Exhibit 19—Transcript of Miller case argument upon motion to supplement and explain order of dismissal.

Lowell W. Taylor, Williams, Bradbury, McCaleb & Hinkle, Solicitors and Counsel for Plaintiff.

[fols. 564 & 565] Clerk's Certificates to foregoing transcript omitted in printing.

[fol. 566] IN UNITED STATES DISTRICT COURT

No. 935 Equity

THE R. M. HOLLINGSHEAD COMPANY

vs.

THE BASSICK MANUFACTURING COMPANY

MANDATE OF CIRCUIT COURT OF APPEALS—Filed Jan. 9, 1932

The President of the United States of America to the Honorable the Judges of the District Court of the United States for the Western District of Tennessee, Greeting:

Whereas, lately in the District Court of the United States for the Western District of Tennessee, before you or some of you, in a cause between The Bassick Manufacturing Company, Plaintiff, and The R. M. Hollingshead Company, Defendant, a decree was entered on the 25th day of May, 1928, and the further decree on June 23rd, 1928;

And whereas, the said plaintiff The Bassick Manufacturing Company, appealed to this court as by the inspection of the transcript of the record of the said District Court, which was brought into the United States Circuit Court of Appeals for the Sixth Circuit by virtue of an appeal agreeably to the Act of Congress, in such cases made and provided, fully and at large appears.

And whereas, in the present term of October, in the year of our Lord, one thousand nine hundred and thirty, the said cause came on to be heard before the said United States Circuit Court of Appeals for the Sixth Circuit, on the said transcript of record, and was argued by counsel;

On consideration whereof, it is now here ordered, adjudged and decreed by this court that the appeal from the said District Court in this cause be and the same is hereby dismissed.

You, therefore, are hereby commanded that such proceedings be had in said cause, in conformity with the opinion and decree of this court, as according to right and justice, and the laws of the United States, ought to be had, the said appeal notwithstanding.

[fol. 567] Witness the Honorable Charles Evans Hughes, Chief Justice of the United States, the seventh day of Jan-

uary, in the year of our Lord one thousand nine hundred and thirty-two.

J. W. Menzies, Clerk, United States Circuit Court of Appeals for the Sixth Circuit. (Seal.)

IN UNITED STATES DISTRICT COURT

MANDATE OF CIRCUIT COURT OF APPEALS—Filed Jan. 9, 1932

The President of the United States of America, to the Honorable the Judges of the District Court of the United States for the Western District of Tennessee; Greeting:

Whereas, lately in the District Court of the United States for the Western District of Tennessee, before you or some of you, in a cause between The Bassick Manufacturing Company, Plaintiff, and The R. M. Hollingshead Company, Defendant, a decree was entered on the 25th day of May, 1928, and the further decree on June 23rd, 1928.

And whereas, the said defendant, The R. M. Hollingshead Company, appealed to this court as by the inspection of the transcript of the record of the said District Court, which was brought into the United States Circuit Court of Appeals for the Sixth Circuit by virtue of an appeal agreeably to the Act of Congress, in such cases made and provided, fully and at large appears.

And whereas, in the present term of October, in the year of our Lord, one thousand nine hundred and thirty, the said cause came on to be heard before the said United State Circuit Court of Appeals, for the Sixth Circuit, on the said transcript of record, and was argued by counsel; [fol. 568] On consideration whereof, It is now here ordered, adjudged and decreed by this court that the appeal from the said District Court in this cause be and the same is hereby dismissed.

You, therefore, are hereby commanded that such proceedings be had in said cause, in conformity with the opinion and decree of this court, as according to right and justice, and the laws of the United States, ought to be had, the said appeal notwithstanding.

Witness the Honorable Charles Evans Hughes, Chief Justice of the United States, the seventh day of January,

in the year of our Lord one thousand nine hundred and thirty-two.

J. W. Menzies, Clerk, United States Circuit Court of Appeals for the Sixth Circuit. (Seal.)

IN UNITED STATES DISTRICT COURT

MOTION TO MOVE COURT TO ENTER ORDER MAKING DECREE OF CIRCUIT COURT OF APPEALS THE DECREE OF THIS COURT —Filed Sept. 23, 1932

On Saturday, October 1, 1932, defendant The R. M. Hollingshead Company will move the court to enter an order making the decree of the United States Circuit Court of Appeals in this cause the decree of this court and setting aside the decrees of this court heretofore entered on May 25, 1928, and June 23, 1928, and setting aside the injunction writ heretofore filed herein on July 9, 1928, but continuing in force the interlocutory injunction heretofore issued and restoring this case to the docket of this court to be heard on its merits, without any question herein being foreclosed.

Defendant The R. M. Hollingshead Company will also ask leave to file an amendment to its answer and also to [fol. 569] file interrogatories addressed to the plaintiff under Federal Equity Rule No. 58. Copy of the decree which defendant will ask this court to enter and also copy of the proposed amendment to defendant's answer and also copy of the interrogatories addressed to plaintiff are attached to this motion.

Leonard L. Kalish, Burch Minor & McKay, Solicitors for Defendant.

Copy of the above motion and also copies of the decree, amendment to answer, and interrogatories referred to in said motion have been delivered today to Mr. Lowell Taylor, attorney for plaintiff The Bassick Manufacturing Company, this September 23, 1932.

Chas. N. Burch, Solicitor for Defendant.

In United States District Court

Order Making Decree of Circuit Court of Appeals the Decree of This Court—Entered Sept. 23, 1932. H. B. Anderson, Judge.

This cause came on this day to be heard upon the mandates from the United States Court of Appeals for the Sixth Circuit, and mandates being dated the 7th day of January, 1932 and filed in this court on the 9th day of January, 1932; said mandates are in words and figures as follows:

"The President of the United States of America to the Honorable the Judges of the District Court of the United States for the Western District of Tennessee—Greeting:

Whereas, lately in the District Court of the United States for the Western District of Tennessee, before you or some [fol. 570] of you, in a cause between The Bassick Manufacturing Company, Plaintiff, and The R. M. Hollingshead Company, Defendant, a decree was entered on the 25th day of May, 1928, and the further decree on June 23rd, 1928.

And whereas, the said plaintiff, the Bassick Manufacturing Company appealed to this court as by the inspection of the transcript of the record of the said District Court, which was brought into the United States Circuit Court of Appeals for the Sixth Circuit by virtue of an appeal agreeably to the Act of Congress, in such cases made and provided, fully and at large appears.

And whereas, in the present term of October, in the year of our Lord, one thousand nine hundred and thirty, the said cause came on to be heard before the said United States Circuit Court of Appeals for the Sixth Circuit, on the said transcript of record, and was argued by counsel;

On consideration whereof, it is now here ordered, adjudged and decreed by this court that the appeal from the said District Court in this cause be and the same is hereby dismissed.

You, therefore, are hereby commanded that such proceedings be had in said cause in conformity with the opinion and decree of this court, as according to right and

justice, and the laws of United States, ought to be had, said appeal notwithstanding.

Witness the Honorable Charles Evans Hughes, Chief Justice of United States the — day of ——, in the year of our Lord one thousand nine hundred and

J. W. Menizes, Clerk, U. S. Circuit Court of Appeals for the Sixth Circuit."

(No. 5398.)

"The President of the United States of America to the Honorable the Judges of the District Court of the United States for the Western District of Tennessee—Greeting:

Whereas, lately in the District Court of the United States for the Western District of Tennessee, before you or some of you, in a cause between The Bassick Manufacturing Company, Plaintiff, and The R. M. Hollingshead Company, Defendant, a decree was entered on the 25th day of May, 1928, and the further decree on June 23rd, 1928.

[fol. 571] And whereas, the said defendant, The R. M. Hollingshead Company appealed to this court as by the inspection of the transcript of the record of the said District Court, which was brought into the United States Circuit Court of Appeals for the Sixth Circuit by virtue of an appeal agreeeably to the Act of Congress, in such cases made and provided, fully and at large appears.

And whereas, in the present term of October, in the year of our Lord one thousand nine hundred and thirty, the said cause came on to be heard before the said United States Circuit Court of Appeals for the Sixth Circuit, on the said transcript of record, and was argued by counsel;

On consideration whereof, it is now here ordered, adjudged and decreed by this court that the appeal from the said District Court in this cause be and the same is hereby dismissed.

You, therefore, are hereby commanded that such proceedings be had in said cause, in conformity with the opinion and decree of this court, as according to right and justice, and the laws of the United States, ought to be had, the said appeal notwithstanding.

Witness, the Honorable Charles Evans Hughes, Chief Justice of the United States, the — day of ——, in the year of our Lord one thousand nine hundred and

J. W. Menizes, Clerk, U. S. District Court of Appeals for the Sixth Circuit."

(No. 5397.)

Upon consideration whereof it is ordered that the mandates of the said United States Circuit Court of Appeals be and are hereby made the decrees of this court. And in accordance therewith it is ordered that the decree of this court entered herein on May 25, 1928, and the decree of this court entered herein on June 23, 1928 be and the same are hereby set aside. And it is further ordered that the injunction writ filed herein on July 9, 1928, making perpetual the temporary injunction therefore granted, be and the same is hereby set aside.

It is further ordered, however, that the temporary or interlocutory injunction heretofore issued in this cause shall remain in full force and effect subject to further order of this court.

[fol. 572] It is further ordered that this cause be restored to the trial docket of this court to be heard on its merits, no question herein being foreclosed, as adjudged by the said United States Circuit Court of Appeals.

Thereupon defendant R. M. Hollingshead Company asked leave of the court to file an amendment to its answer and also leave to file interrogatories addressed to the plaintiff herein in accordance with Federal Equity Rule 58, said defendant exhibiting to the court its proposed amendment to its answer and also the interrogatories which it proposes to file. Upon consideration thereof it is ordered by the court that the defendant be permitted to file said amendment to its answer and also said interrogatories.

IN UNITED STATES DISTRICT COURT

AMENDMENT TO ANSWER OF DEFENDANT, THE R. M. HOLLINGSHEAD COMPANY—Filed Sept. 23, 1932

Now comes defendant, by leave of court first obtained, and amends its answer heretofore filed, as follows:

At the end of the list of patents inserted into paragraph 13 of the Answer, by the Amendment thereto filed December 15, 1927, (said list now appearing at the bottom of page 32 and top of page 33 of the Transcript of Record on Appeal No. 5397, entitled "The R. M. Hollingshead Company vs. The Bassick Manufacturing Company" in the United States Circuit Court of Appeals for the Sixth Circuit) insert the following list of additional patents:

Beebe, 314,783, March 31, 1885;
Schumacher, 920,188, May 4, 1909;
James, 929,091, July 27, 1909;
Manzel, 931,327, Aug. 17, 1909;
Morse, 1,248,526, Dec. 4, 1917;
Piquerey, 1,276,108, Aug. 20, 1918.

[fol. 573] At the end of the list of patents inserted into paragraph 14 of the Answer, by the Amendment thereto filed December 15, 1927, (Said list now appearing in the lower half of page 33 of the Transcript of Record on Appeal No. 5397, entitled "The R. M. Hollingshead Company vs. The Bassick Manufacturing Company" in the United States Circuit Court of Appeals for the Sixth Circuit) insert the following list of additional patents:

Uhl et al., 1,205,686, Nov. 21, 1916;
Zerk, 1,619,455, May 1, 1927;
Sheppard (British), 140,355, March 25, 1920;
Wm. L. Morris, Re. 18123, July 7, 1931;
Wm. L. Morris, Re. 18278, Dec. 8, 1931;
Wm. L. Morris, 1,816,022, July 28, 1931.

Leonard L. Kalish, Burch Minor & McKay, Solicitor and Counsel for Defendant.

IN UNITED STATES DISTRICT COURT

DEFENDANT'S INTERROGATORIES UNDER RULE 58—Filed Sept. 23, 1932

Now comes the defendant, by leave of court first obtained and propounds the following interrogatories to be answered under oath on, or before the — day of ——, 1932, by J. E. Otis, Jr., Vice-President and general manager of the plaintiff corporation, or by such other officer of the plaintiff corporation having knowledge of the facts:

Interrogatory No. 1: State whether plaintiff has acquired any interest in any one or more of the following United States patents, and if so, state in which it has acquired an interest:

Wm. L. Morris, Re. 18,123, July 7, 1931;
Wm. L. Morris, Re. 18,278, Dec. 8, 1931;
Wm. L. Morris, 1,816,022, July 28, 1931.

[fol. 574] Interrogatory No. 2: State whether plaintiff has taken a license under any one or more of the United States patents identified in the preceding Interrogatory No. 1, and if so, state under which of these patents it has taken a license.

Interrogatory No. 3: If answer to either interrogatory No. 1 or Interrogatory No. 2 is in the affirmative, produce and submit a true and complete copy of any and all existing instrument or instruments, or other writings defining plaintiff's interest in, or plaintiff's license under any one or more of the patents identified in Interrogatory No. 1.

Interrogatory No. 4: If answer to either Interrogatory No. 1 or Interrogatory No. 2 is in the affirmative, state whether any claim or claims of any one or more of the patents identified in Interrogatory No. 1, are readable upon the same structure of defendant's alleged infringing devices in this suit, which plaintiff alleges in its Bill of Complaint to constitute the infringement complained of, of either or both of the patents here in suit.

Interrogatory No. 5: If answer to either Interrogatory No. 4 is in the affirmative, either wholly or in part, point out particularly each and every claim of the patents identified in Interrogatory No. 1, which are readable upon the same structure of defendant's alleged infringing devices in this suit, which plaintiff alleges in its Bill of Complaint to constitute the infringement complained of, of either or both of the patents here in suit, and point out particularly, with reference to the Exhibits in this case, upon which of the several alleged infringing structures each claim is readable.

Leonard L. Kalish, Burch Minor & McKay, Solicitor and Counsel for Defendant.

[fol. 575] IN UNITED DISTRICT COURT

ORDER DISALLOWING MOTIONS TO SET ASIDE FORMER DECREES, ETC.—Entered Nov. 19, 1932. H. B. Anderson, Judge

This cause was heard on the motion of the defendant filed herein on September 23, 1932 and the oral motions made in open court in pursuance thereof (and the affidavit of L. L. Kalish, filed in support thereof) in which motions defendant, The R. M. Hollingshead Company, moved the court to enter an order making the decree of the United States Circuit Court of Appeals in this cause the decree of this court and to set aside the decrees of this court heretofore entered on May 25, 1928 and June 23, 1928 and to set aside the injunction writ filed herein on July 9, 1928, and to restore this cause to the docket of this court to be heard on its merits, without any question herein being foreclosed, and defendant, The R. M. Hollingshead Company, also moved the court for leave to file an amendment to its answer and also to file interrogatories addressed to the plaintiff under Federal Equity Rule No. 58, and defendant attached to said motions the copy of the decree which the defendant asked the court to enter and also a copy of the proposed amendment to defendant's answer and also a copy of the interrogatories addressed to the plaintiff.

After argument of counsel and due consideration by the court, it is ordered, adjudged and decreed that each and all of said motions be disallowed and denied, to which action of the court the defendant duly excepted.

This order is entered prior to final decree of this date.

[fol. 576] IN UNITED STATES DISTRICT COURT

FINDINGS OF FACT AS PROPOSED BY DEFENDANT—Filed Nov. 19, 1932

1. That the defendant's coupler, exemplified in and forming a part of plaintiff's Exhibit A of the affidavit of D. A. Beezley of April 12, 1926, and also illustrated in the drawing constituting plaintiff's Exhibit 15, is a coupler of the "suctional" type shown in the drawings of Gullborg patent No. 1307734 and described in the specification thereof and variously defined in claims 1, 2, 3, 4, 5, 6, 8 and 10 thereof.

2. That defendant's coupler, exemplified in and forming a part of Exhibit A of the affidavit of O. A. Cumming of September 13, 1926 and illustrated in the drawing constituting plaintiff's Exhibit 16, does not embody the suction-producing construction shown in the drawings of the Gullborg Patent No. 1307734 and described in the specification of said patent and variously defined in claims 1, 2, 3, 4, 5, 6, 8 and 10 of said patent.

3. That defendant's push-contact type nozzle (for use in conjunction with defendant's lubricant compressor) exemplified in Exhibit A of affidavit of O. A. Cumming of September 13, 1926, and also illustrated in the drawings constituting defendant's Exhibit No. 47, has a contact surface which is not spherical but which is conical.

4. That defendant's coupler, referred to in paragraph 1 hereof, is incapable of effecting any "suction" or "self-cleansing" result, when associated with either defendant's service type compressor exemplified in Exhibit A of Beezley affidavit and in defendant's Exhibit 8a or with defendant's handy-shop type compressor exemplified in Exhibit A of Cumming affidavit and in defendant's Exhibit 6 and illustrated in plaintiff's Exhibit 16, because said defendant's compressors are not provided with any means for relieving or stopping, prior to uncoupling, any heavy grease pressure produced by the compressor.

Respectfully submitted, by Leonard L. Kalish, of Counsel for Defendant.

[fol. 577] IN UNITED STATES DISTRICT COURT

PROCEEDINGS ON MOTIONS TO ENTER DECREE AND FINDINGS OF FACT

The hearing on the above matter was had before the Honorable Harry B. Anderson, Judge of the District Court of the United States for the Western District of Tennessee, in the District Court House at Memphis, Tennessee, beginning at ten o'clock A. M. November 19th, 1932, whereupon proceedings were had as follows:

Appearances

For Plaintiff: Mr. Lynn A. Williams, of Chicago, Illinois; Mr. Lowell Taylor, of Memphis, Tennessee.

For Defendant: Mr. Leonard L. Kalish, of Philadelphia, Pa.; Mr. Chas. N. Burch, of Memphis, Tennessee.

The Court: Go ahead.

Mr. Kalish: The court will recall that in the summer of 1928 a trial was had before this court in the case of Bassick Manufacturing Company vs. R. M. Hollingshead Company. As a result of that trial a decree was entered, and on that decree an appeal was taken, and incidentally, a cross appeal was taken. That appeal was prosecuted in the regular way, and it came on for argument, on, I think it was the 20th of February, 1930. It was argued at length, and voluminous briefs filed on both sides, and in June of 1931, I think—I may be wrong a month or two, but approximately so, an opinion was handed down by the Court of Appeals for the Sixth Circuit, written by Judge Denison, in which the appeal was dismissed on the ground that it was an appeal primarily from a decree which had the characteristics solely of a declaratory judgment. In other words the Court of Appeals took the view that these structures upon which plaintiff brought the suit were not the structures forming the basis of the appeal, but that the structures forming the basis of the appeal were solely those structures which the defendant submitted at one stage as you will recall, to get the view of the court upon those newly submitted structures. Those newly submitted structures were referred to the Master, as you will recall, and the Court of Appeals got the view, took the view I would say, ably guided [fol. 578] by Mr. Williams' brief, that the appeal was in fact nothing more than an appeal from a declaratory judgment.

As a matter of fact, your Honor will recall that the court enjoined the infringement not only of those things, those devices which the defendant submitted and which were referred to the Master, but this court also enjoined and held as infringements those very devices which plaintiff based its suit upon.

However, that may be, a motion was brought, and petition was filed for a rehearing, and the court rendered an opinion on that without granting the re-hearing, in which it reiterated its belief that this case was not in proper shape for appeal, and referred the case back to this court——

The Court: Well, it was primarily the Court's fault. I think Mr. Williams submitted a decree, very lengthy decree that was in proper form, but being a question of ordinary practice of law, Mr. Minor and I could see no necessity of that lengthy decree, and entered a short decree that we thought covered the subject. Apparently Mr. Minor and I were decidedly wrong on that matter.

Mr. Kalish: Well, I am inclined to think the decree which was entered was probably sufficient, had it not been for the very strenuous contention that the case was not in proper form. But however that may be, we are now back before the District Court with the directions of the Appellate Court to consider this case further, if desired, to hold no question concluded by the opinion of the Court of Appeals, and a motion has been presented here about ten weeks ago which is up before the Court now. A motion to set aside the decree of this court rendered in 1928, so that the case may then be opened for further proceedings.

A second motion is pending before this court also, a motion for leave to file interrogatories, and requiring the interrogatories propounded by defendant—requiring the plaintiff to answer the interrogatories.

A further motion is pending before this court, and that is a motion under the answer——

Mr. Williams: I didn't mean to interrupt, but you don't want to misstate your motion; your motion is, is it not, for leave to file interrogatories? There is no motion for a direction as to answering interrogatories, because I have not prepared to answer any motion to direct answers, but merely the motion as for leave to file. I think there is a difference.

[fol. 579] Mr. Kalish: Mr. Williams is technically probably correct. However, we are both approximately—well, I know I am twelve hundred miles from the seat of this court, and my client, the defendant in this case, has been in this litigation now six and one half years, and it has been under an injunction over five years, prevented from doing an otherwise lucrative business. An injunction which has seriously injured this defendant. Now technically Mr. Williams is correct. However, I am going to ask this Court to dispose of all matters which this court may now dispose of, because Mr. Williams, I am confident, is fully familiar with every detail of this case, and I am sure Mr. Williams needs

no preparation to argue the simple question of interrogatories, and I don't think we ought to be required to come down here three weeks or three months later on that second question.

Now before going into these three motions I would like to review, because it is necessary that the Court understand what the issues are before it passes——

The Court (interrupting): Well now, let's get this straight. Is it not a fact that the Court of Appeals dismissed the appeal on account of the form of the decree, and the only thing that is now before the court is to get a decree in proper shape so that it can be appealed from? Isn't that all? I don't want to hear this case again. I have heard all I want of this case—here, and in New York and in other places that I want to, unless there is something new. I decided it at the time, and if a decree can be drawn in accordance with my decision in 1930 which will properly present the matter to the Court of Appeals, I want that done.

Mr. Williams: I have such a decree here.

Mr. Kalish: If your Honor please, such a decree may possibly be drawn, if there is some understanding and agreement as to what the facts of the case are. Let me just say a few words on that——

The Court: Certainly.

Mr. Kalish: Since the court rendered its decision in this case a rule has been promulgated by the Supreme Court, Rule 70½, which specially requires the District Court to supply with its decision a series of findings of fact. The reason for that is obvious. When a case comes from this court to an Appellate Court, not only shall the points of law forming the basis of the decision be announced, but the facts which formed the basis of that decision shall also be stated.

[fol. 580] This case proceeded in a way which is possibly not common in this court, but is common in patent cases. The plaintiff filed its motion for preliminary injunction, and as the basis for that motion, had filed a series of affidavits, among them the affidavits establishing the purchase of the alleged infringing structures. Those alleged infringing structures, and the accompanying affidavits were the basis of his preliminary injunction, or the preliminary injunction of this court. When the case proceeded to final hearing those physical exhibits were in Memphis. Testimony of

defendant's witnesses was taken under the statute by depositions in Philadelphia. We consulted Mr. Hansmann, of Mr. Williams' office, on the occasion of the taking of these depositions. We were ready then, we so said, to produce expert testimony in the usual way to prove, to establish whether or not these alleged infringing structures did, or did not, respond to the claim of the patents. It was then agreed between Mr. Hansmann and myself and Mr. Fairbanks that it would not be necessary to make arrangements to bring these plaintiff's exhibits from Memphis to Philadelphia, in order that our witnesses might testify with respect to these devices. We supplied then and there structures which were then and there agreed upon to be duplicates of the devices which were here in court. They were so identified. They were testified to. We spent, I don't recall now, but between two and three—no, I think it was about four days taking the depositions of these witnesses with Mr. Hansmann and Mr. Williams' office, cross examining at length. These devices were exhibited then, and were later accepted by this court as being duplicate of the devices forming the basis of the suit, the devices which plaintiff introduced on its motion for preliminary injunction. The case before this court was argued on the assumption—which has never, in the least, been in doubt, which was never questioned—was argued on the assumption that the devices which were introduced in Philadelphia were in fact duplicates, and they are in fact duplicates of the devices which plaintiff introduced. So the case proceeded on the argument. In one case you will recall there was the Gullborg patent, which had a coupler known as the bayonet coupler, and arguments on that patent proceeded on whether or not our coupler was capable of producing the so-called sectional effect which was required in some, but not all of the claims of the patent. Mr. Williams argued it did, and we argued it did not.

[fol. 581] As to the Zerk patent, it was argued by us that our device did not respond to the claim of the patent because our device did not have the spherical surface required by the claims, but had a conical surface. Mr. Williams argued at length and successfully that it did not make any difference whether it had a spherical nozzle or a conical nozzle, that that was merely a matter of degree.

And so the case went to the Court of Appeals, and for the first time in the Court of Appeals we were confronted

with a brief by Mr. Williams, covering, I should say, over three hundred pages, which was devoted to the three main points. The first point was that the only devices before the court were those devices which were introduced by plaintiff on its motion for preliminary injunction and reintroduced at the trial hearing, and that the devices which were introduced in Philadelphia, and which were accepted throughout as being, in fact, duplicates of those devices, were, in fact, not before the court at all. And secondly, Mr. Williams argued that these devices which were introduced by plaintiff, the one had suction, and the other had the spherical surface. These things were things not found in the record, but arrived at by demonstrations in open court before the Appellate Court.

The third point was that the whole appeal was from a declaratory judgment and hence should be dismissed.

Now it is, therefore, I think, important, that before this case leaves this court again, we shall have not only a decision but a series of findings of fact which will establish once and for all just what the facts are upon which we are going to appeal. Now if Mr. Williams is in agreement as to what the facts are, I think this court can enter a decree today. If Mr. Williams is not in agreement as to what the facts are, I request that the defendant be given opportunity to establish just what the facts are.

The Court: I am not going to hear any more evidence on this matter. There was a full hearing before a Master, and a most lengthy argument before me, and I decided the case, and I rather directed the nature of the decree which apparently is the cause of all this trouble. Let a decree be entered as of my ruling of that date, which you gentlemen remember a great deal more clearly than I do.

Mr. Williams: I have here, if the court please, a decree which is the conventional decree in a patent case, which was submitted to your Honor after your Honor's decision was [fol. 582] announced from the bench. We did include an injunction relative to these new or proposed devices which Mr. Kalish has referred to. The Court of Appeals has held, in effect, that it was an inappropriate use of the Court's discretion to attempt to pass upon the question of contributory infringement by the defendant's sale of those proposed substitutes for what had previously been sold, particularly in view of the fact that this whole suit related to contributory infringement as contrasted with direct infringement,

and a contributory infringement involved the element of intent. The intent with which the defendant sells its devices as to whether the purchaser shall combine them with something else to complete an infringement is really at the foundation of the question of contributory infringement. The defendant, in effect, after the motion for preliminary injunction had been granted, came into court and said "Now here are some other devices which we exhibit that we would like the judgment of the court as to whether we may sell these without infringement, and we call the court's attention to the fact that while these devices can be used in combination with the alemite fittings of the plaintiff, they also can be used with this funny new fitting that we have devised and we have submitted. As the Court of Appeals said in its decision, the representation made by the defendant was that if it sold these grease guns with these proposed new couplers, they would be used with the defendant's proposed new fittings. We complained that that was a camouflage, that the real intent was to sell those guns to service stations and garages with the expectation that they would be used with our fittings.

The Court: Well, the matter of interest to the court at this time is to have a decree in accordance with the opinion that was rendered at that time, and in accordance with the opinion handed down by the Court of Appeals on the appeal.

Mr. Williams: Well now, I speak of that only for this reason, that the decree which was submitted in May, 1928, undertook to enjoin the defendant in accordance with the Master's report, and your Honor's confirmation of the report relative to those new things as well as the things that they actually had sold. Now to that extent the Court of Appeals has held that the undertaking to give that declaratory judgment was virtually an abuse of discretion. Now I have therefore drawn a new decree which omits those things, relative to the declaratory judgment phase of the [fol. 583] matter, and I have that here, and I have also suggestions as to findings of fact, as counsel suggests is in order under this new Rule 70½, I believe. I will be glad to hand up that.

The Court: Have you shown a copy to Mr. Kalish?

Mr. Kalish: No, I have not.

The Court: Well, I will take a recess of fifteen minutes, and let Judge Burch and Mr. Kalish look over that.

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Judge Burch: Just before your Honor adjourns, the motion here is for leave to file an amendment to the answer, with the idea of taking some additional proof, and also a motion to file interrogatories with the idea of adducing some additional proof. Now those two motions, of course, will have to be passed upon, either granted or denied.

The Court: I am going to deny those motions. This was a very full hearing on the same things, and it went off on a question of declaratory judgment and so forth, and the court is very overburdened at this time, a matter of refreshing my mind when I passed on it, and all I want to do is get a decree entered which is in accordance with my opinion at that time, and the rulings of the Circuit Court, and therefore I will take a recess. I will overrule the motion about additional proof at present.

Mr. Kalish: May I say a word in that direction? I don't think I made it clear to your Honor what this motion to amend amounts to, and why that motion is brought. Since this court rendered its opinion, as a matter of fact more than a year thereafter, certain patents issued from the Patent Office bearing a filing date earlier than either of the patents in suit, which under the decision of the Supreme Court may be prior art. That, we say, is newly discovered evidence.

Mr. Williams: You do not say that in your motion papers. There is no*w* the slightest showing on any basis——

The Court: Well, let Mr. Kalish finish his statement.

Mr. Williams: Pardon me.

Mr. Kalish: Again I might say these are technical objections, but if your Honor please, I will revise my motion right now to the extent of saying that the motion to amend the answer is for the purpose of submitting to the court, introducing before the court newly discovered evidence which Mr. Williams recognizes as being newly discovered evidence, evidence which was not available at the time of the trial and prior to the decree, could not have been avail-[fol. 584] able by the most diligent search, because the patents did not issue until a year or more after the decree of this court, because patent applications, prior to the issuance of patents thereon, are held in absolute secrecy by the Government, and not open to inspection to anybody except the applicant, his attorney and assignee. Those applications were in the Patent Office, if I am not mistaken, fourteen years. They were filed prior to the date of filing

of either of these two patents in suit, and they disclose the full invention of one of the patents in suit, and have a vital bearing on the other patent in suit. Under the Supreme Court decision of Alexander Davis vs. Milburn, the patents which I seek to submit, notably the Morris patent, are prior art with respect to both of these patents, and I think it is in order for the court to admit them as newly discovered evidence.

The Court: I gave a full hearing on this matter. There was a full hearing before the Master. The decree went off largely through the court insisting on a short decree in accordance with the Tennessee equity practice, and also by a passing on a declaratory judgment. I am not going to open the case at this time. I am going to stand on my original ruling, and only cut out any rulings on the declaratory judgment feature, and I will take a recess of fifteen minutes so you can look over the proposed decree, and the findings of fact and either agree or settle the matter.

To the action of the court in refusing to grant the motions referred to, the defendant then and there excepted.

The said motions are as follows:

On Saturday, October 1, 1932, defendant The R. M. Hollingshead Company will move the court to enter an order making the decree of the United States Circuit Court of Appeals in this cause the decree of this court and setting aside the decrees of this court heretofore entered on May 25, 1928 and June 23, 1928, and setting aside the injunction writ heretofore filed herein on July 9, 1928, but continuing in force the interlocutory injunction heretofore issued and restoring this case to the docket of this court to be heard on its merits, without any question herein being foreclosed.

Defendant The R. M. Hollingshead Company will also ask leave to file an amendment to its answer and also to file interrogatories addressed to the plaintiff under Federal Equity Rule No. 58. Copy of the decree which defendant will ask this court to enter and also copy of the proposed amendment to defendant's answer and also copy of the [fol. 585] interrogatories addressed to plaintiff are attached to this motion.

A recess was thereupon taken until two o'clock P. M.

Afternoon Session

The hearing was resumed at two o'clock P. M. as follows:

Judge Burch: May it please the court, there is an affidavit of Mr. Kalish I would like to file in support of the motions that were made this morning giving the reasons he feels that it is necessary to take additional proof, to file amendment to his answer and to file interrogatories in order to adequately present his defense.

The Court: Very well.

Mr. Williams: I want to object to the receipt of that affidavit at this time. It was only handed me since two o'clock, and we, of course, have no opportunity to answer it.

The Court: Well, let it be filed.

Mr. Williams: I think I should like to take an exception to that.

The Court: Certainly.

The said affidavit is as follows:

I, L. L. Kalish, being duly sworn, depose and say:

That I am of lawful age, an attorney-at-law and have been of counsel for defendant in the above identified cause since its beginning.

I am familiar with the proceedings in this case. I have examined the three Morris patents, Re-issue No. 18123, Re-issue No. 18278 and No. 1816022 and truly believe that the disclosure of said patents constitute an anticipation of the patents in suit, particularly the Zerk patent No. 1,475,980, and are, therefore, material to the determination of this cause.

The above identified Morris patents bear original Patent Office filing date of August 7, 1916, but were not issued until substantially subsequent to the decree of this court of May, 1928, and therefore, said patents constitute newly discovered evidence which was not available at the trial of this cause and could not have been rendered available by diligent search because the files of these patents in the Patent Office did not become open to public inspection until their respective dates of issuance, all of which were much subsequent to the trial and determination of this cause in May, 1928.

Further affiant saith not.

[fol. 586] Judge Burch: Now, your Honor, this morning overruled the motions that were made, and of course, I am

not going to re-argue that, but I have prepared a decree covering what took place this morning, which covers one page of typewritten matter. I shall read it, or give it to your Honor. I submitted a copy of it to Mr. Williams.

The Court: Just read it.

Judge Burch: Would your Honor like me to read it?

The Court: Yes.

Counsel thereupon read in evidence the said decree, the same being in words and figures following, to-wit:

This cause was heard on the motion of the defendant filed herein on September 23, 1932 and the oral motions made in open court in pursuance thereof (and the affidavit of L. L. Kalish filed in support thereof) in which motions defendant, The R. M. Hollingshead Company, moved the court to enter an order making the decree of the United States Circuit Court of Appeals in this cause the decree of this court and to set aside the decrees of this court heretofore entered on May 25, 1928 and June 23, 1928, and to set aside the injunction writ filed herein on July 9, 1928, and to restore this cause to the docket of this court to be heard on its merits, without any question herein being foreclosed, and defendant, The R. M. Hollingshead Company, also moved the court for leave to file an amendment to its answer and also to file interrogatories addressed to the plaintiff under Federal Equity Rule No. 58, and defendant attached to said motions the copy of the decree which the defendant asked the court to enter and also a copy of the proposed amendment to defendant's answer and also a copy of the interrogatories addressed to the plaintiff.

After argument of counsel and due consideration by the court it is ordered, adjudged and decreed that each and all of said motions be disallowed and denied, to which action of the court the defendant duly excepted.

This order is entered prior to final decree of this date.

Mr. Williams: To that I have no objection. I was handed a copy of that. Did someone pick up that copy here? I don't find that.

Judge Burch: I will give you another copy, if you don't find that one. Just take this extra copy.

The said decree was thereupon signed by the court.

The Court: Have you gentlemen gotten together on the decree and finding of fact?

[fol. 587] Mr. Williams: Counsel undertook to let me have by one o'clock a copy of what they proposed, and they telephoned to Mr. Taylor that it was not available, and it was handed me here five or ten minutes after two, and there seems to have been the order which your Honor has hard, and also a proposed decree which I have not had an opportunity to read.

The Court: Well then, suppose I take a recess of ten or fifteen minutes to let you read it.

Mr. Williams: I think I had better.

The Court: All right, we will take a recess.

A short recess was had after which the hearing was resumed as follows:

Mr. Kalish: May it please your Honor, we have a decree prepared conforming to your Honor's decision, in which we have identified the various structures enjoined, first by reference to exhibit numbers of the devices which the plaintiff introduced through affidavits, and then also identified through the corresponding exhibits introduced by defendant as duplicates of plaintiff's exhibits which were introduced in connection with the taking of the testimony on behalf of the defendant.

I understand Mr. Williams' objection is primarily that these other exhibit numbers are included, and I must therefore explain why they are included.

As I think I stated briefly this morning, in taking testimony under the statute on behalf of the defendant, we did not have available the particular devices, the physical things which plaintiff introduced in evidence, and it was then and there agreed between Mr. Hansmann and myself that these devices which we did have in Philadelphia were in fact, and they are in fact, duplicates of the devices which plaintiff introduced, and which plaintiff represents are the things being sued upon. All of the defendant's testimony was based upon these devices which were available in Philadelphia. The question of their identity was not questioned then, was not questioned at the final hearing, was not questioned at any time until the case came to the Court of Appeals, and I think probably their identity may not be questioned now, and it seems to me this is a late date to question their identity, and therefore any effort to exclude these other exhibits and thereby to divorce all the evidence adduced on behalf of the defendant from this case, I think

is inappropriate. I think certainly the defendant should be entitled to that testimony which was adduced on its behalf, and except for these exhibits that would be divorced from this case.

[fol. 588] The Court: Is there any other difference between your decree and the one prepared by Mr. Williams?

Mr. Williams: Yes, sir.

Judge Burch: This last line under No. 8 should read: "And the same being exemplified." Does that meet your idea?

Mr. Williams: Really it does not. Counsel—I asked him during the recess to tell me why he wanted this change. He seemed disinclined to tell me, so that I would say to the court so far I have here just now for the first time heard what the reason for this proposition is. Here is a record of the Court of Appeals that contains the depositions that counsel refers to. They were taken in this case. They were filed in this case. The exhibits referred to in the deposition were filed in this case. If there be such a stipulation as counsel says there is, that something or other was identical with something else, why, that must be or can be in the Appellate Court, and I haven't the slightest purpose or intent, by any form of decree, to prevent the defendant from having available in this Court or the Court of Appeals or any other Court all of its evidence. It is in the record; the exhibits are in the record.

Now this is what I do object to; when we filed this suit, we came in shortly with some affidavits of two men, Cummings and Beezley, who said that they had purchased from the defendant an Exhibit "A," a gun thus and so, and an Exhibit "A" to another affidavit, thus and so, the physical things were identified and tagged and marked by the notary, and our suit was based upon proof of the sale of those particular devices and their appurtenances.

Now as Mr. Kalish says, the defendant went, as they had a right to do, to Philadelphia and took some depositions, and there offered in evidence quite a list of devices, with or without what stipulation I don't recall and I don't think it is in the least necessary to hunt them up now, and here are lists of five or six things of this kind, and of that kind, and the other kind, and as to some of those I haven't had time to check over. I suppose there are sixteen or twenty here. As to some of them it is my idea that the things

identified in Philadelphia, about which testimony was taken, are not like the ones which the evidence shows to have been sold by the defendant to these two witnesses whose testimony was stipulated as a part of the trial record.

Now what we have done in our proposed decree is to identify those devices. I guess I had better read a sample:

[fol. 589] "That the defendant, R. M. Hollingshead Company, has infringed eleven certain claims and violated the rights of the plaintiff thereunder by the sale of—

'a' compressors of the type exemplified in Exhibit A of the affidavit of D. A. Beezley of April 12, 1926."

That is what the prima facie proof of the plaintiff was on.

Now as contrasted with that, what the defendant is proposing is something like this:

"That the defendant is infringing, by the sale of compressors of the type exemplified in Exhibit A of the affidavit of D. A. Beezley of April 12, 1926"—and to that I have no objection; then they go on and say "The coupler element of said compressor of Exhibit A being illustrated in the drawing of plaintiff's exhibit 15, page 373, of the printed transcript of record on appeal." Now why that? That printed appeal record is no part of the record of this court, and why need we make it a part of this record when there is in this court a drawing, I presume the original of that particular drawing, and to which we refer in our decree. Then he goes on to say "And being further exemplified by defendant's Exhibit 8, 8-A, 8-B, 8-E, and defendant's Exhibit 41."

Now if those additional exhibits are identically the same thing there can be no value in having the thing identified half a dozen times over? If they differ, then why are we not entitled to have a decree directed to the thing which the proof shows to have been sold and upon which we based our suit?

Now seemingly in all of the other identifying paragraphs there is first the reference to the device originally sold as shown by the proof, and then supplemented with things just comparable with the one I have read "Constituting the device Exhibit 15 appearing on page 373 of the printed transcript of record on appeal, and further exemplified in defendant's exhibit No. 41 and another one."

The Court: Well, I don't conceive that to be a matter of great importance, one way or the other, but I will rule on that when I pass on the other matter. Now what is the second modification?

Mr. Williams: There is another modification. Our decree specifies that one of these devices infringes, and there is a contributory infringement of claims 14 and 15 of Gullborg patent. Counsel have added to that "Claims 1, 2, 5, 8 and 10"—we don't want that allegation.

The Court: If you didn't claim that——

[fol. 590] Mr. Williams: Why should that be decreed?

The Court: I will rule with you on that point.

Mr. Williams: Now as to the matter of the identification of various of these types, the importance of that is this: if I can turn—I think it is a matter of a good deal of importance—I have it here—we have a photograph of a so-called Zerk adapter that was sold with one of those guns, or the impression made by that adapter, it is generally of a spherical contour; I think that some of these things which the defendant is seeking now to have added, some of these exhibits probably show an adapter having a conical contour. Is that a fact as to some of these?

Mr. Kalish: The Zerk adapter, both what you introduced in evidence as well as what we introduced in evidence, was identical. Your conclusion as to their shape is incorrect. It seems to me the court must ultimately determine what the fact is as to that case, because it is that shape that apparently determine infringement. Now the devices are here, or should be here, and I think it is up to the court to decide that question of fact.

Mr. Williams: As counsel says, the devices which were sold to Cummings and Beezley are here as exhibits, and they show for themselves what their shape is or is not. Now to say that the defendant shall be enjoined, not only against the sale of the thing which they did sell, but some other, and as we think different things which they are putting in in connection with this deposition in Philadelphia and against which our suit was not directed and against which our claim was not made, and which I think was different from the one to which the suit was directed and which was made the basis—it was the sale in——

The Court: Well, the suit turns, of course, on the device you bought here.

Mr. Williams: I beg your pardon?

The Court: I say, the suit turns on the device you actually bought here.

Mr. Williams: I think, absolutely, and I would like that to be the thing which they are enjoined against selling, and not some different thing which we have not alleged constitutes infringement.

The Court: Well, we will pass from that. Now the second point——

Mr. Williams: Was the allegation.

The Court: Infringement of certain claims which you do not claim. Yes.

Mr. Williams: That is the second matter.

[fol. 591] The Court: Now what do you say about that, Mr. Kalish?

Mr. Kalish: The allegation of infringement of claims which they don't claim, I am willing to have that stricken out.

The Court: All right, you are together on that. That point is out of the way. Now what is the third point of difference?

Mr. Williams: When it comes to the part of this proposed decree that a writ of perpetual injunction issue forthwith against The R. M. Hollingshead Company, the proposed decree does not specify the form of a device which they are to be enjoined against selling. "Which is the apparatus hereinabove referred to." Now I think that is a matter of form. I haven't authority here to show whether the enjoining part of the decree should identify the things enjoined, but I have never seen a decree which did not identify them exclusivly, and I can see no possible objection to identifying them as does the form of decree which I have proposed.

Mr. Kalish: If your Honor please, I am agreeable. I merely provided for that in the interest of saving space.

The Court: All right, you are agreed on the third point. Now what is the fourth point?

Mr. Williams: Another is that they have for some reason modified the form of decree submitted by us. Our decree says they shall be enjoined against the sale or adoption of any device or devices adapted for use in systems or combinations embodying the inventions described and named, and so forth, whether for original equipment, or replacement, or otherwise. We copied into this decree form, because of some prior adjudications had in the Sixth

Circuit Court of Appeals in the Larkin and other cases, and our form read something like this: "'Either for original equipment or replacement under the guise of repairs or otherwise,'' which is identically the language which was approved by the Sixth Circuit Court of Appeals in the cases which were decided in 18 Federal, 2, and it is a form which has been incorporated——

The Court: There is practically no difference in the language there.

Mr. Kalish: Well, there is this difference. In one case in the Sixth Circuit which Mr. Williams speaks about there apparently was a situation where the defendant did something illegal in the guise of something legal, and that carries with it the implication of someone doing something un- [fol. 592] derhanded. That may have been the fact in those cases; it is not a fact here, so I see no reason why Hollingshead Company should be charged to be doing anything under the guise of something else unless that is a fact, and there is nothing here to support that.

The Court: Nothing in the record?

Mr. Kalish: No fact to support that intimation.

Mr. Williams: All I can say about that, your Honor, is that after the adjudication of these half a dozen or eight early cases in the Courts of Appeal, and where the language was as I have read it, we have, I suppose, secured the entry of probably one hundred or one hundred fifty decrees——

Mr. Kalish: Undefended.

Mr. Williams: But undefended——

The Court: Now don't address each other. If you have any remarks to make to one another, make them through the court.

Mr. Williams: Well, there has been one hundred or one hundred fifty of these decrees, some consented to, and I suppose some forty or fifty bitterly contested, in every one of which the language has been followed and incorporated. I have here those volumes that contain——

The Court: I don't see that that is a matter of great importance: It strikes me, just hearing that language read once, that either form accomplishes the purpose.

Mr. Williams: I would think so, but when we have a form that the court of Appeals have approved in so many of these cases, both in the Sixth Circuit and the Seventh——

The Court: Well, I think a little variation of language might improve judicial style. I will rule with the defendant on the fourth point. Now what is the other point?

Mr. Williams: I think there are no others.

The Court: You have agreed on the second and you have agreed on the third. I ruled with the defendant on the fourth.

And there is no fifth point, and that leaves the question of the exhibits, and I ruled with the plaintiff on that.

Mr. Williams: Very well.

Mr. Kalish: If your Honor please, we now have a series——

[fol. 593] Judge Burch: Perhaps we had better get this straightened out right now while it is fresh in the minds of everybody, this decree.

Mr. Kalish: Is it your Honor's position that this decree written by the defendant might be retained with the elimination of the exhibits, and with the reiteration of the things enjoined?

The Court: No, I agreed—no, the elimination of the claims. Now on the third point I—you get together on that. What that come down to.

Mr. Williams: If the court please——

The Court: I think it is the thing to do is to take Mr. Williams' decree except as it has in there——

Mr. Williams: About the "guise."

The Court: Leave that out, that word "guise" and so forth.

Mr. Kalish: Your Honor, at this point I think we ought to have an understanding about how this leaves the case. Can we reach the same position? Certain evidence was adduced——

The Court: Well, if that evidence introduced at Philadelphia was covered by a stipulation that it was the same, when the thing is argued it will be better than—and I cannot hunt this device up this afternoon and say whether they are; I would not know whether they are the same, would not if I were to look at them. But the matter involved is the device—what was ultimately enjoined are the devices that the plaintiff bought here, so I will rule with the plaintiff on that and we will adopt the plaintiff's form of decree except as to the fourth point raised in which I adopt your language instead of Mr. Williams' language.

Mr. Kalish: Now we have the last thing before the court, findings of fact, and in that connection I think I would just like to call your Honor's attention, if I may, to an excerpt from a recent decision of Judge Denison in the case entitled Briggs v. United States, decided December 11, 1930, in which Judge Denison mentioned for the first time, gives any indication of the scope of Rule 70½, and this is what Judge Denison said:

"Briggs appeals from an order "Padlocking (Title 27, Section 33, U. S. C. A.) his cafe-cabaret night club in Detroit. Proofs were taken in open court, and a duly settled narrative statement of evidence is returned.

"This is an equity proceeding. The recent Supreme Court rule (Equity rule 70½, June 2, 1930) requires that the Trial Judge make finding of facts and law. Lacking [fol. 594] any exposition of that rule by the Supreme Court, we do not understand that it contemplates, in the ordinary equity case, all the proceedings and formalities which attend such findings in suits at law. Until it is otherwise authoritatively held, we shall think the rule satisfied by a clear and concise statement by the judge—whether called findings or opinion—which shows that he regards as the essential facts and the applicable rules of law. The present record lacks even this; but the rule," the judge goes on to say that the rule——

The Court: I understand.

Mr. Kalish: Is so recent that he will not rule against it on that.

The Court: Yes, I understand.

Mr. Kalish: Now the essential facts, and it didn't make a great deal of difference whether your Honor gathers those facts from plaintiff's set of devices, or defendant's set of devices, the essential facts are these; as to the Gullborg patent, it is essential, as a matter of fact, whether the couplers forming parts of the defendant's structures are of the sectional type, or of the nonsectional type. Whether they are couplers with that self-cleansing action upon which Judge Denison, in the Sixth Circuit, sustained claims 1 to 8 inclusive. Or whether they did not have that suction. As to the Zerk patent it is essential to know as a fact, whether the defendant's device has the spherical contact surface required by each of the three claims in suit of the Zerk patent, or whether it has some other kind of surface; con-

ical, or hexagonal, or any other kind, and I have here a series of findings of fact which I would like to read your Honor, and they are very brief.

The Court: Have you and Mr. Williams gone over your findings of fact together?

Mr. Kalish: Yes, but we have not agreed by any means.

The Court: But you have gone over them, have you?

Mr. Kalish: Yes.

Mr. Williams: I have looked at them and tried to find out what the reason for the change was, and counsel seems disposed to tell the court, rather than me.

The Court: Well, the reason we took the recess was for you gentlemen to get together as near as possible, save me from passing on some matters that are not as fresh in mind as they might be.

Thereupon another recess of a few minutes was taken, after which the hearing proceeded further as follows:

[fol. 595] Mr. Kalish: May it please your Honor, I think we are in agreement on some things, and the others we find we cannot agree on.

The Court: All right. That is what I want to thresh out, what you are not agreed on.

Mr. Kalish: I agree, in order to simplify the thing, to eliminate reference to the defendant's exhibits.

The Court: All right.

Mr. Kalish: As to which Mr. Williams objects.

The Court: Very well.

Mr. Kalish: So that the first finding of fact is agreed to. And I just have this one suggestion to make, that instead of identifying that drawing plaintiff's exhibit as Exhibit J of the plaintiff's affidavit, which does not—I mean, it is not known in this case as Exhibit J, it is known in this case as plaintiff's Exhibit 15, I think it ought to carry that exhibit number which it has in this court. And as to finding No. 2——

Mr. Williams: Well, we are agreed only about striking out this matter. I am not agreeing to the rest of that.

Mr. Kalish: What are you agreeing to?

Mr. Williams: We both agree that we might strike out this reference to the transcript on appeal and so on. I am not agreeing to the rest of this.

Mr. Kalish: You are not agreeing to the rest of this?

Mr. Williams: No.

Mr. Kalish: Then you are not agreeing to anything.

Mr. Williams: No.

The Court: All right, each of you read your first finding of fact and I will settle it.

Mr. Williams: I wonder if I might hand you a copy that I have drafted? (Document handed to the court.)

Mr. Kalish: I will just mark what I am willing to agree on here, by agreement.

Mr. Williams: I wonder if I might say that I am sure that the authorities are to this effect, that this finding of fact should be a finding of ultimate facts, and not evidentiary matter.

The Court: I think that is undoubtedly the rule. Furthermore I think that more particularly would be required in a patent suit than in closing up a speakeasy, or injunction. I don't think the rule, the great liberality of that rule would apply in litigation of this sort. I interpreted that opinion of Judge Denison's to be that every time I closed a speak- [fol. 596] easy I would have to give in an informal way, a finding of fact that he had been selling liquor there contrary to law, and the conclusion of law was that he had violated the Volstead Act, and no great formality would be required. But I imagine in a case where things of this kind are involved, that you would have to have a little more formal finding of fact than in a speakeasy case, or night club case. All right, now let's see.

Mr. Kalish: The first finding of fact which we request is that this coupler which is identified as Exhibit A of the affidavit of D. A. Beezley, and also shown by the plaintiff in its drawing Exhibit 15, is of the suctional type shown in the drawings of the patent and described in the specifications and covered by these claims. Now that happens to be a fact that has been plaintiff's contention; it is the basis upon which that appliance was enjoined, and I can see no reason why that fact should not be stated.

No. 2 refers to the second bayonet coupler which is plaintiff's Exhibit A of the Cummings affidavit, and that appliance undoubtedly is of the non-suctional type so far as the evidence in this case points. The coupler does not have the suctional type construction as required by those particular claims, in the opinion of Judge Denison. That second coupler was testified to and its non-suctional char-

acter was never questioned by anybody, including the plaintiff.

The third is as to the character of the Zerk type push contact nozzle which plaintiff has introduced in evidence. I believe that that appliance ought to be examined by the court, if it is to be passed upon, unless there is an agreement here.

And fourth, is the point as to which there is evidence in the case which is not contradicted or controverted by anybody and that is that notwithstanding the so-called suction effect coupler of plaintiff's Exhibit A to the Beezley affidavit, that coupler is incapable of producing any suction in conjunction with pumps of the character defendant is charged with selling, because those, producing two or three thousands of pounds of pressure, have no means provided within them for relieving that enormous pressure prior to uncoupling, hence the minute suction produced within the coupler is overcome a thousand fold by the pressure of the pump, and hence no effective suction can be produced. The evidence in the case on that point is clear and uncontroverted and I see no reason why the court should not find that as a fact, because it is an essential element of the decision.

[fol. 597] Mr. Williams: I would like to take these things up in the reverse order. As to the fourth finding, that is an evidentiary matter. At best it was—I don't care in the least what counsel says, I think their pumps can be operated in such a way that the suction is utilized, and whether or not it is utilized goes merely to the question of infringement. The Exhibit is not here, and your Honor will remember the hours that we spent in the demonstration of this apparatus.

The Court: Yes, I remember the demonstration.

Mr. Williams: I don't think it is in the least necessary for the court to take the time to re-settle the controversy. It was settled by the conclusions of the court, in its opinion, and I can't for the life of me see that anything is to be gained by rearguing that matter before your Honor. Now the third one goes to the question of whether the device has a spherical surface, or a conical surface. We say it is substantially spherical, and counsel says it is conical, or substantially conical. Well, the physical thing is in evidence as a part——

The Court: It will be there at the Court of Appeals.

Mr. Williams: Absolutely.

The Court: Now what do you say about No. 2?

Mr. Williams: My main objection to No. 2 is that that starts off to and decides these evidentiary matters, and the ultimate fact is the thing. The only thing that is important—I do not think the first two are so important except as they lead to No. 4, and if we are going to be consistent, why try to cover any of these matters in any of those findings? I can't see why we should.

The Court: Well now, what objection have you got, except for the admission of these four findings of fact, to the findings of fact and conclusions of law presented by the plaintiff?

Mr. Kalish: My objections are primarily these, they provide a series of findings of fact on things which are not at all an issue, never were in issue. In other words here we have six pages of findings of fact on the very things which have not been in issue. I will leave it to the court's judgment as to what the purpose of what may be, but certainly it can have no useful purpose. Now I say this, the question or title is not in issue, and there is no need in discussing that. The question of validity is one which the court decided in its decree. That is not a fact. It is a finding of law—that is, its decision, and so on straight down, the facts that——

The Court: Your objections cover 1, 2, 3, 4, 5, 6.——

[fol. 598] Mr. Kalish: And 7 and 8. We are not interested with the state of incorporation of anybody. That is not in issue. Now we come down to 8—9, and the only thing that is found there is the decree of the court. The court has decreed as a matter of its final decision that the Hollingshead Company sold these things without authority. Well, that is just the decision itself. Now what are the facts which caused the court to hold that the Hollingshead Company had no authority? Because these devices were painted green, or because they were long or short, or what were the things about the devices which make them infringements? In other words, this is nothing more than a reiteration in different language of the decree.

The Court: Well, I am going to adopt the plaintiff's form. Note your exception. Now if you will prepare the decree as suggested by me you can have Mr. Taylor and Judge Burch present that Monday.

Mr. Kalish: May I ask your Honor that we be permitted to submit as part of our record the proposed findings of fact which we submitted?

The Court: Certainly.

The said proposed findings of facts submitted by the defendant are as follows:

1. That the defendant's coupler, exemplified in and forming a part of plaintiff's exhibit A of the affidavit of D. A. Beezley of April 12, 1926, and also exemplified in defendant's exhibit No. 41, and also illustrated in the drawing constituting plaintiff's exhibit 15 appearing on page 373 of the printed transcript of record on appeal, is a coupler of the "suctional" type shown in the drawings of Gullborg Patent No. 1307734 and described in the specification thereof and variously defined in claims 1, 2, 3, 4, 5, 6, 8 and 10 thereof.

2. That defendant's coupler, exemplified in and forming a part of Exhibit A of the affidavit of O. A. Cumming of September 13, 1926 and also exemplified in defendant's Exhibit 6c and illustrated in the drawing constituting plaintiff's Exhibit 16 appearing on page 274 of the printed transcript of record on appeal, does not embody the suction-producing construction shown in the drawings of the Gullborg Patent No. 1307734 and described in the specification of said patent and variously defined in claims 1, 2, 3, 4, 5, 6, 8 and 10 of said patent.

3. That defendant's push-contact type nozzle (for use in conjunction with defendant's lubricant compressor) ex- [fol. 599] emplified in Exhibit A of affidavit of O. A. Cumming of September 13, 1926, and also exemplified in defendant's Exhibits Nos. 45 and 45a and also illustrated in the drawings constituting defendant's Exhibit No. 47, has a contact surface which is not spherical but which is conical.

4. That defendant's coupler, referred to in paragraph 1 hereof, is incapable of effecting any "suction" or "self-cleansing" result, when associated with either defendant's service type compressor exemplified in Exhibit A of Beezley affidavit and in defendant's Exhibit 8a or with defendant's handy-shop type compressor exemplified in Exhibit A of Cumming affidavit and in defendant's Exhibit 6 and

illustrated in plaintiff's Exhibit 16, because said defendant's compressors are not provided with any means for relieving or stopping, prior to uncoupling, any heavy grease pressure produced by the compressor.

The Court: Now have you your decree ready now?

Mr. Williams: I think we have, have we not, Mr. Burch?

Judge Burch: So far as I know. There was only one change to be made.

The Court: That was striking out that "under the guise" proposition.

Judge Burch: The technical side I don't understand, but if I am correct about it there was only one change your Honor made in the plaintiff's decree and that was on page 4 line 7, you struck out the words "Under the guise of repairs."

Mr. Williams: "Under the guise of repairs"?

The Court: Yes. Now where is that?

Judge Burch: Seventh line. Isn't that right, Mr. Kalish?

Mr. Kalish: That is right. The order allowing an appeal will be taken care of as a matter of course, will it?

The Court: Oh, yes.

Thereupon court was adjourned.

[fol. 600] IN UNITED STATES DISTRICT COURT

DECREE—Entered Nov. 19, 1932. H. B. Anderson, Judge.

This cause having been heard before the court at final hearing, testimony of witnesses having been heard in open court, and depositions having been filed by both parties, counsel for the respective parties having been heard; and the court having been fully advised in the premises and having entered its order of May 25, 1928, confirming the report of the Standing Master and ordering that the temporary injunction hereinbefore issued be made perpetual; and appeals having been taken by both parties from said order, and the mandates of the United States Circuit Court of Appeals for the Sixth Circuit having been handed down dismissing said appeals and remanding the cause to this

court for further proceedings in conformity with the opinion rendered by said Circuit Court of Appeals; and the cause again having come before this court for settlement of the decree,

The court hereby finds:

(1) That the plaintiff, The Bassick Manufacturing Company, is the owner of United States Letters Patent to Arthur V. Gullborg, No. 1,307,734 of June 24, 1919, and to Oscar Zerk No. 1,475,980 of December 4, 1923; the inventions disclosed therein and of all rights and privileges under the said Letters Patent.

(2) That both of said Letter Patent are good and valid in law as to claims 1, 2, 3, 4, 5, 6, 8, 10, 14 and 15 of Gullborg patent No. 1,307,734, and claims 2, 3 and 5 of Zerk patent No. 1,475,980.

(3) That the defendant, The R. M. Hollingshead Company, has infringed claims 1, 2, 3, 4, 5, 6, 8, 10, 14 and 15 of said Gullborg patent No. 1,307,734 and violated the rights of the plaintiff thereunder by the sale of:

(a) Compressors of the type exemplified in Exhibit A of the affidavit of D. A. Beezley of April 12, 1926.

(b) Compressors of the handy shop type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926, and illustrated in the drawing exhibit K of the affidavit of Ernest W. Davis of October 21, 1926.

(4) That the defendant, The R. M. Hollingshead Company, has infringed claims 1, 2, 3, 4, 5, 6, 8, 10, 14 and 15 of said Gullborg patent No. 1,307,734, and violated the rights of the plaintiff thereunder by the sale of couplers of [fol. 601] the type exemplified in Exhibit A submitted with the affidavit of D. A. Beezley of April 12, 1926, and illustrated in the drawing exhibit J of the affidavit of Ernest W. Davis of October 21, 1926.

(5) That the defendant, The R. M. Hollingshead Company, has infringed claims 14 and 15 of said Gullborg patent No. 1,307,734, and violated the rights of the plaintiff thereunder by the sale of couplers of the type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926, and as illustrated in the drawing Exhibit K of the affidavit of Ernest W. Davis of October 21, 1926.

(6) That the defendant, The R. M. Hollingshead Company, has infringed claims 2, 3, and 5 of the said Zerk patent No. 1,475,980 and violated the rights of the plaintiff thereunder by the sale of lubricant compressors and Zerk adapters of the type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926.

Wherefore, it is ordered, adjudged and decreed:

(1) That a writ of perpetual injunction issue forthwith under the seal of this court enjoining and restraining the defendant, The R. M. Hollingshead Company, its officers, agents, employees, associates and confederates from making, using or selling any of the forms or parts of lubricating apparatus hereinabove referred to, and particularly:

(a) Compressors of the type exemplified in Exhibit A of the affidavit of D. A. Beezley of April 12, 1926.

(b) Compressors of the handy shop type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 12, 1926, and illustrated in the drawing Exhibit K of the affidavit of Ernest W. Davis of October 21, 1926.

(c) Couplers of the type exemplified in Exhibit A submitted with the affidavit of D. A. Beezley of April 12, 1926, and illustrated in the drawing Exhibit J of the affidavit of Ernest W. Davis of October 21, 1926.

(d) Couplers of the type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926, and as illustrated in the drawing Exhibit K of the affidavit of Ernest W. Davis of October 21, 1926.

(e) Lubricant compressors and Zerk adapters of the type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926.

And/or any other device or devices embodying the inventions described and claimed in claims 1, 2, 3, 4, 5, 6, 8, 10, 14 and/or 15 of Gullborg patent No. 1,307,734, and/or claims 2, 3 and/or 5 of Zerk patent No. 1,475,980 and/or [fol. 602] any of the parts thereof and/or any other device or devices adapted for use in systems or combinations embodying the same, either for original equipment or for replacement or otherwise, and from offering or advertising so to do, and from aiding or abetting or in any way con-

tributing to the infringement of the said claims of the said patents, or either of them.

(2) That plaintiff recover from the defendant, The R. M. Hollingshead Company, the damages which the plaintiff has suffered from the profits which the said defendant has made by reason of its infringement of the said Letters Patent, and that this cause be referred to A. G. Riley, Esq., as Special Master of this court, to take and report an account of such damages and profits, and that the said defendant and the officers, agents, clerks and employees are required to attend before the said Master from time to time as he shall direct and to produce before him all such books, papers, vouchers, documents and devices, and to submit to such oral examination as he may direct.

(3) That plaintiff recover from the defendant its costs and disbursements of this suit to be taxed by the clerk, and that the plaintiff have execution therefor against the said defendant.

November 19th, 1932.

IN UNITED STATES DISTRICT COURT

FINDINGS OF FACT AND CONCLUSIONS OF LAW—Filed Nov. 19, 1932

This cause having been heard at final hearing upon the record and proceedings herein, and upon the tesimony of witnesses heard in open court, counsel for the respective parties having been heard and the court, being fully advised in the premises, files the following findings of fact and conclusions of law in accordance with Equity Rule 70½.

[fol. 603] Findings of Fact

1. That Arthur V. Gullborg was the original, first and sole inventor of the subject matter of United States Letters Patent No. 1,307,734 for Lubricating Means.

2. That the said Gullborg Letters Patent No. 1,307,734 were granted on June 24, 1919, to the said Arthur V. Gullborg.

3. That the said Gullborg patent No. 1,307,734 was subsequently assigned by mesne assignments to The Bassick Manufacturing Company, plaintiff herein.

4. That Oscar Zerk was the original, first and sole inventor of the subject matter of United States Letters Patent No. 1,475,980 for Lubricating Apparatus.

5. That the said Zerk Letters Patent No. 1,475,980 were granted on December 4, 1923, to the Allyne-Zerk Company of Cleveland, Ohio.

6. That the said Zerk patent No. 1,475,980 was assigned by the Allyne-Zerk Company to The Bassick Manufacturing Company, plaintiff herein.

7. That the plaintiff, The Bassick Manufacturing Company, is a corporation organized and existing under and by virtue of the laws of the State of Delaware, having its principal place of business at Chicago, in the County of Cook and State of Illinois.

8. That the defendant, The R. M. Hollingshead Company, is a corporation organized and existing under and by virtue of the laws of the State of New Jersey, having a regular and established place of business at Memphis, in the county of Shelby and State of Tennessee.

9. That the defendant, The R. M. Hollingshead Company, sold without authority

(a) compressors of the type exemplified in Exhibit A of the affidavit of D. A. Beezley of April 12, 1926;

(b) couplers of the type exemplified in Exhibit A submitted with the affidavit of D. A. Beezley of April 12, 1926, and illustrated in the drawing Exhibit J of the affidavit of Ernest W. Davis of October 21, 1926;

(c) compressors of the handy shop type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926, and illustrated in the drawing Exhibit K of the affidavit of Ernest W. Davis of October 21, 1926;

(d) couplers of the type exemplified in Exhibit A of [fol. 604] the affidavit of O. A. Cumming of September 13, 1926, and as illustrated in the drawing Exhibit K of the affidavit of Ernest W. Davis of October 21, 1926.

(e) lubricant compressors and Zerk adapters of the type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926.

10. That the plaintiff, The Bassick Manufacturing Company, has complied with the United States Statutes relating to marking patented devices manufactured and sold by it.

Conclusions of Law

1. That this court has had, during the pendency of this suit, and still has, jurisdiction of the matter in controversy.

2. That the plaintiff, The Bassick Manufacturing Company, is the owner of United States Letters Patent Nos. 1,307,734 and 1,475,980, dated June 24, 1919, and December 4, 1923, respectively, the inventions disclosed therein and of all rights and privileges under the said Letters Patent, including all rights of recovery for past infringement of said Letters Patent.

3. That the said Letters Patent Nos. 1,307,734 and 1,475,980, granted to Arthur V. Gullborg and Oscar Zerk respectively, are good and valid in law.

4. That the said Gullborg patent No. 1,307,734 and Zerk patent No. 1,475,980 are not anticipated by any defense raised by The R. M. Hollingshead Company.

5. That the defendant, The R. M. Hollingshead Company, has infringed claims 1, 2, 3, 4, 5, 6, 8, 10, 14 and 15 of said Gullborg patent No. 1,307,734 and violated the rights of the plaintiff thereunder by the sale of

(a) compressors of the type exemplified in Exhibit A of the affidavit of D. A. Beezley of April 12, 1926;

(b) compressors of the handy shop type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926, and illustrated in the drawing Exhibit K of the affidavit of Ernest W. Davis of October 21, 1926.

6. That the defendant, The R. M. Hollingshead Company, has infringed claims 1, 2, 3, 4, 6, 8, 10, 14 and 15 Gullborg patent No. 1,307,734 and violated the rights of the plaintiff thereunder by the sale of couplers of the type exemplified [fol. 605] in Exhibit A submitted with the affidavit of D. A. Beezley of April 12, 1926, and illustrated in the drawing Exhibit J of the affidavit of Ernest W. Davis of October 21, 1926.

7. That the defendant, The R. M. Hollingshead Company, has infringed claims 14 and 15 of said Gullborg patent No. 1,307,734 and violated the rights of the plaintiff thereunder by the sale of couplers of the type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926, and as illustrated in the drawing Exhibit K of the affidavit of Ernest W. Davis of October 21, 1926.

8. That the defendant, the R. M. Hollingshead Company, has infringed claims 2, 3, and 5 of the said Zerk patent No. 1,475,980 and violated the rights of the plaintiff thereunder by the sale of lubricant compressors and Zerk adapters of the type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926.

9. That the plaintiff is entitled to a writ of permanent injunction under the seal of this court enjoining and restraining the defendant, The R. M. Hollingshead Company, its officers, agents, employees, associates and confederates, from making, using or selling any of the forms or parts of lubricating apparatus hereinabove referred to, and particularly:

(a) compressors of the type exemplified in Exhibit A of the affidavit of D. A. Beezley of April 12, 1926;

(b) compressors of the handy shop type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926, and illustrated in the drawing Exhibit K of the affidavit of Ernest W. Davis of October 21, 1926;

(c) couplers of the type exemplified in Exhibit A submitted with the affidavit of D. A. Beezley of April 12, 1926, and illustrated in the drawing Exhibit J of the affidavit of Ernest W. Davis of October 21, 1926;

(d) couplers of the type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926, and as illustrated in the drawing Exhibit K of the affidavit of Ernest W. Davis of October 21, 1926;

(e) lubricant compressors and Zerk adapters of the type exemplified in Exhibit A of the affidavit of O. A. Cumming of September 13, 1926;

[fol. 606] and/or any other device or devices embodying the inventions described and claimed in claims 1, 2, 3, 4, 5, 6, 8, 10, 14 and/or 15 of Gullborg patent No. 1,307,734 and/or claims 2 3 and/or 5 of Zerk patent No. 1,475,980 and/or any of the parts thereof, and/or any other device or devices adapted for use in systems or combinations embodying the same, either for original equipment or for replacement under the guise of "repairs" or otherwise, and from offering or advertising so to do, and from aiding or abetting or in any way contributing to the infringement of the said claims of the said patents, or either of them.

10. That the plaintiff is entitled to recover from the fendant, The R. M. Hollingshead Company, the prof which the said defendant has made and the damages which the plaintiff has suffered by reason of the defendant's infringement of the Letters Patent in suit, and to recover its costs and disbursements of this proceeding in accordance with the statutes and rules in such cases made and provided.

H. B. Anderson, United States District Judge.

IN UNITED STATES DISTRICT COURT

PETITION FOR APPEAL—Filed Dec. 16, 1932

To the Honorable Harry B. Anderson, United States District Judge:

The above named defendant, The R. M. Hollingshead Company, conceiving itself aggrieved by:

(1) The decree of this Court entered in the above entitled cause on May 25th 1928;

(2) The further order or decree of this Court entered in the above entitled cause on June 23, 1928;

(3) The order of this Court entered in the above entitled cause on November 19th, 1932, disallowing and denying defendant's motion—

[fol. 607] (a) for an order making the decree of the United States District Court of Appeals for the Sixth Circuit, in this cause, the decree of the District Court; and

(b) to set aside the decrees of this Court entered May 25, 1928 and June 23, 1928, respectively, and the injunctions based thereon; and

(c) to restore this cause to the docket of this Court to be heard on its merits, without any question herein being foreclosed; and

(d) to amend defendant's answer to plead in defense, certain prior art patents Nos. Reissue 18,123; Reissue 18,278 and No. 1,816,022, as constituting newly discovered evidence, and also certain other prior art patents; and

(e) for leave to file interrogatories respecting said newly discovered prior art patents; and

(4) The decree of this Court entered in the above entitled cause on November 19, 1932;

does hereby appeal from said decrees and order, to the United States Circuit Court of Appeals for the Sixth Circuit, for the reasons set forth in the Assignment of Errors filed herein, and it prays that its appeal be allowed and that citation be issued as provided by law, and that a transcript of the record and proceedings, and documents and exhibits upon which said decrees are based, duly authorized, be sent to the United States Circuit Court of Appeals for the Sixth Circuit, sitting at Cincinnati, Ohio, under the rules of said Court in such cases made and provided.

The R. M. Hollingshead Company, by Leonard L. Kalish, Its Solicitor and Counsel. Burch Minor & McKay, of Counsel.

[fol. 608] IN UNITED STATES DISTRICT COURT

ORDER ALLOWING APPEAL—Entered Dec. 16, 1932

On this day, came the parties by their solicitor and counsel, and, on motion of solicitor and counsel for The R. M. Hollingshead Company, defendant, it is

Ordered as follows: That the appeal to the United States Circuit Court of Appeals for the Sixth Circuit from the decrees of this Court entered and filed in this cause on May 25, 1928; June 23, 1928; and November 19th, 1932, respectively, be, and the same is hereby allowed, and that a citation issue as provided by law, and that so much of the transcript of record herein as is necessary and essential to the proper presentation thereof be forthwith transmitted to the said United States Circuit Court of Appeals for the Sixth Circuit, and it is further

Ordered that the bond on appeal be fixed in the sum of Two Hundred Fifty ($250.00) Dollars.

H. B. Anderson, United States District Judge.

Dated this 16th day of December, 193-.

IN UNITED STATES DISTRICT COURT

ASSIGNMENT OF ERRORS—Filed Dec. 16, 1932

Now comes the defendant in the above entitled cause, and says that in the record and proceedings of this Court, and that in the decrees of this Court entered in the above entitled cause on May 25, 1928, June 23, 1928, and November 19, 1932, respectively, there is manifest error, to wit:

1. The Court erred in sustaining the Bill of Complaint and making and entering a decree in conformity with the prayers thereof.

2. The Court erred in making and entering said decree of May 25, 1928.

[fol. 609] 3. The Court erred in making and entering said decree of June 23, 1928.

4. The Court erred in not vacating and setting aside said decrees of May 25, 1928 and June 23, 1928, respectively, and the injunctions based thereon, in conformity with the mandates of the United States Circuit Court of Appeals, dated January 7, 1932, and filed in the District Court in this cause on January 9, 1932.

5. The Court erred in entering the order of November 19, 1932 denying defendant's motions.

6. The Court erred in disallowing and denying defendant's motions:

(a) for an order making the decree of the United States District Court of Appeals for the Sixth Circuit, in this cause, the decree of the District Court; and

(b) to set aside the decrees of this Court entered May 25, 1928 and June 23, 1928, respectively, and the injunctions based thereon, and

(c) to restore this cause to the docket of this Court to be heard on its merits, without any question herein being foreclosed; and

(d) to amend defendant's answer to plead in defense, certain prior art patents Nos. Reissue 18,123; Reissue 18,278 and No. 1,816,022, as constituting newly discovered evidence, and also certain other prior art patents; and

(e) for leave to file interrogatories respecting said newly discovered prior art patents.

7. The Court erred in making and entering said decree of November 19, 1932, finding the patents in suit valid and infringed, and ordering an injunction and an accounting.

8. The Court erred in adopting, making and entering as its findings of fact "The Findings of Fact and Conclusions of Law" as submitted by plaintiff.

9. The Court erred in failing to give and state its findings of fact and conclusions of law as required by Equity Rule No. 70½ promulgated by the Supreme Court of the United States.

10. The Court erred in failing to give findings of fact in substantial accordance with the findings of fact as proposed by defendant.

11. The Court erred in finding and holding claims 1, 2, 3, 4, 5, 6, 8 and 10 of Gullborg patent No. 1,307,734, valid.

[fol. 610] 12. The Court erred in finding and holding claims 14 and 15 of the Gullborg patent No. 1,307,734, valid.

13. The Court erred in finding and holding claims 2, 3 and 5 of Zerk patent No. 1,475,980, valid.

14. The Court erred in finding and holding that defendant infringed claims 1, 2, 3, 4, 5, 6, 8 and 10 of said Gullborg patent No. 1,307,734, and violated the rights of plaintiff thereunder by the sale of compressors of the type exemplified in Exhibit A of the Affidavit of D. A. Beezley, of April 12, 1926, (the "coupler" element of said compressor being illustrated in the drawing of plaintiff's Exhibit 15).

15. The Court erred in finding and holding that defendant infringed claims 14 and 15 of said Gullborg patent No. 1,307,734, and violated the rights of plaintiff thereunder by the sale of compressors of the type exemplified in Exhibit A of the Affidavit of D. A. Beezley, of April 12, 1926, (the "coupler" element of said compressor being illustrated in the drawing of plaintiff's Exhibit 15).

16. The Court erred in finding and holding that defendant infringed claims 1, 2, 3, 4, 5, 6, 8 and 10 of said Gullborg patent No. 1,307,734, and violated the rights of plaintiff thereunder by the sale of compressors of the handy shop type exemplified in Exhibit A of the Affidavit of O. A. Cumming, of September 13, 1926, and illustrated in the drawing Exhibit K of the Affidavit of Ernest W. Davis, of October 21, 1926 (said drawing being plaintiff's Exhibit 16).

17. The Court erred in finding and holding that defendant infringed claims 14 and 15 of said Gullborg patent No. 1,307,734, and violated the rights of plaintiff thereunder by the sale of compressors of the handy shop type exemplified in Exhibit A of the Affidavit of O. A. Cumming, of September 13, 1926, and illustrated in the drawing Exhibit K of the Affidavit of Ernest W. Davis, of October 21, 1926 (said drawing being plaintiff's Exhibit 16).

18. The Court erred in finding and holding that defendant infringed claims 1, 2, 3, 4, 5, 6, 8, 10, 14 and 15 of said Gullborg patent No. 1,307,734, and violated the plaintiff's rights thereunder by the sale of couplers of the type exemplified in Exhibit A submitted with the Affidavit of D. A. Beezley, of April 12th, 1926, and illustrated in the drawing Exhibit J of the Affidavit of Ernest W. Davis of October 21, 1926 (said drawing being plaintiff's Exhibit 15).

[fol. 611] 19. The Court erred in finding and holding that defendant infringed claims 14 and 15 of said Gullborg patent No. 1,307,734 and violated the rights of plaintiff there-

under, by the sale of couplers of the type exemplified in Exhibit A of the Affidavit of O. A. Cumming, of September 13, 1926, and as illustrated in the drawing Exhibit K of the Affidavit of Ernest W. Davis, of October 21, 1926 (said drawing being plaintiff's Exhibit 16).

20. The Court erred in finding and holding that defendant infringed claims 2, 3 and 5 of the Zerk patent No. 1,475,980 and violated the rights of plaintiff thereunder, by the sale of lubricant compressors and Zerk adapters of the type exemplified in Exhibit A of the Affidavit of O. A. Cumming of September 13, 1926.

21. The Court erred in enjoining defendant, its officers, agents, employees, associates and confederates, from making, using, or selling any of the forms or parts of lubricating apparatus hereinabove referred to in assignments numbered 14, 15, 16, and 17 hereof.

22. The Court erred in enjoining and restraining defendant, its officers, agents, employees, associates and confederates, from making, using or selling "any other device or devices embodying the inventions described and claimed in claims 1, 2, 3, 4, 5, 6, 8, 10, 14 and/or 15 of Gullborg patent No. 1,307,734 and/or claims 2, 3 and/or 5 of Zerk patent No. 1,475,980, and/or any of the parts thereof."

23. The Court erred in enjoining and restraining the defendant, its officers, agents, employees, associates and confederates, from making, selling or using "any other device or devices adapted for use in systems or combinations embodying the inventions of the hereinabove specified claims of said Gullborg patent and said Zerk patent, either for original equipment or for replacement, or otherwise."

24. The Court erred in holding, in confirmation of the Master's report and in overruling defendant's exceptions thereto, that the manufacture, sale and/or use by defendant of grease dispensing pumps or compressors equipped with bayonet type of conduit couplers of the type and character exemplified in Defendant's Exhibits "A," "B" and "F" before the Master, constitutes contributory infringement of claims 14 and/or 15 of the Gullborg patent No. 1,307,734.

25. The Court erred in holding, in effect, that the manufacture, sale and/or use of any old and unpatented grease dispensing pump or compressor having any old and un-

[fol. 612] patented bayonet type of conduit coupler thereon for connection with grease cups manufactured and sold by plaintiff according to the Gullborg Patent No. 1,307,733, constitutes contributory infringement of claims 14 and 15 of the Gullborg Patent No. 1,307,734.

26. The Court erred in holding, in effect, that the manufacture, sale and/or use of any old and unpatented grease dispensing pump or compressor having any old and unpatented contact type of discharge nozzle thereon for connection with certain unpatented grease cups of the general type disclosed in Figure 3 of Zerk Patent No. 1,475,980, manufactured and sold by plaintiff, constitutes contributory infringement of claims 2, 3 and 5 of the Zerk Patent No. 1,475,980.

27. The Court erred in not adjudging plaintiff to have violated the spirit, intent and terms of the Clayton Act (38 Stat. 731; U. S. Comp. Stat., Sec. 8835c).

28. The Court erred in deciding, in effect, that a patent owner, having manufactured and sold a patented article, may prohibit the proper and only possible use of that article, by virute of his ownership of another patent covering that article in combination with the ordinary and unpatented thing with which it must necessarily be used, and without which the patented article would have no utility at all.

29. The Court erred in failing to hold that plaintiff's vendees of the so-called "pin-fittings," manufactured and sold by plaintiff under its Gullborg patent No. 1,307,733, (not in suit), have an implied license to use such "pin-fittings" for the normal purpose and in the normal manner intended and required by the structure of said "pin-fittings," and that in the exercise of this right and license the vendee is at liberty to employ any of the ordinary old and unpatented devices or things of the prior art with which said "pin-fittings" may be used for the attainment of their intended utility.

30. The Court erred in deciding, in effect, that one, having manufactured and sold an unpatented article, may prohibit the proper and only possible use of that article, by virtue of his ownership of a patent covering that article in combination with the ordinary and unpatented things

with which it must necessarily be used and without which the article would have no utility at all.

31. The Court erred in failing to hold that plaintiff's vendees of the so-called "Zerk" type grease cups or "nipples," manufactured and sold by plaintiff, have an implied license to use such grease cups or "nipples," for the normal [fol. 613] purpose and in the normal manner intended and required by the structure of said grease cups or "nipples," and that in the exercise of this right and license the vendee is at liberty to employ any of the ordinary old and unpatented devices or things of the prior art with which said grease cups or "nipples" may be used for the attainment of their intended utility.

32. The Court erred in deciding, in effect, that the seller of a patented, or of an unpatented article, may, by virtue of his ownership of another patent covering that article in combination with the ordinary devices or old things with which it must necessarily be used, impose as a condition of such sale and the right to use that article in the only way it can be used, that such articles shall not be used in combination with said ordinary devices or old things sold by a competitor.

33. The Court erred in enjoining the defendant from manufacturing and selling any and all old and unpatented grease pumps or grease guns and conduit couplers or connectors adapted and intended for use in conjunction with grease cups manufactured and sold by plaintiff under its patent No. 1,307,733 (not in suit).

34. The Court erred in enjoining the defendant from manufacturing and selling any and all old and unpatented grease pumps or grease guns and conduit couplers or connectors adapted and intended for use in conjunction with unpatented grease cups manufactured and sold by plaintiff.

35. The Court erred in enjoining the defendant from selling any old and unpatented pump and hose for the purpose of dispensing rease, equipped with the bayonet type of coupler manufactured and sold by the plaintiff according to the Gullborg Patent No. 1,307,734 in suit, and which plaintiff's product defendant purchased on the open market, contrary to the recommendation implied in the Master's report, ordered aproved, to wit:

"I am further ready to agree with the concluding paragraph of the reply brief that it is no infringement to furnish a 'compressor' minus a 'coupler,' in other words, the pump and hose elements adapted to receive a Gullborg alemite coupler of plaintiff's manufacture. These two devices are public property; * * *"

36. The Court erred in decreeing that defendant be enjoined from issuing and/or selling defendant's pump and [fols. 614 & 615] hose in connection with or attached to a genuine Alemite coupler of plaintiff's manufacture.

37. The Court erred in holding and adjudging that the final decree of dismissal in the case of Bassick Manufacturing Company v. Frank Miller Company No. 2759 United States District Court, District of New Jersey, was not a decree on the merits or a final decree in said New Jersey cause, and that said final decree of dismissal was therefore not a good defense or bar in this Court as res judicata.

38. The Court erred in making perpetual the temporary injunction heretofore granted herein.

39. The Court erred in finding the equities to be with the plaintiff and in awarding it an injunction, accounting and costs as prayed for in the bill.

Wherefore and for divers other errors in the records, proceedings, and decrees and orders of this Court in this cause appearing, said defendant prays that the decrees of this Court entered May 25, 1928; June 23, 1928; and November 19, 1932, respectively, and each of them, be reversed.

Leonard L. Kalish, Solicitor and Counsel for Defendant-Appellant. Burch, Minor & McKay, of Counsel.

Bond on Appeal for $250.00, approved and filed Dec. 16, 1932, omitted in printing.

[fol. 616] In United States District Court

Order Allowing Former Physical Exhibits to Be Sent to Circuit Court of Appeals—Entered Dec. 16, 1932

In this cause it appearing to the court that appeals to the Circuit Court of Appeals for this Circuit were hereto-

fore taken from the decree of this court of May 25, 1928, as corrected by the decree of June 23, 1928, but that said appeals were dismissed because not having been taken from a final decree, the opinion dismissing said appeals being published in 50 Fed. Rep. (2d) 592; and an appeal having been prayed by the defendant from the final decree of this court of November 19, 1932, it is now ordered and adjudged that, in making up the record for this latter appeal, the clerk need not recopy the record up to and including the decree of June 23, 1928, but may use in lieu thereof a printed copy of the record on said first appeal, attaching there to a complete copy of all such proceedings as have occurred in this court since the said decree of June 23, 1928, and certify all the foregoing as the record on the present appeal. Along with the said certified record, the clerk of this court will send to the Circuit Court of Appeals such physical exhibits, if any, as were sent up on the first appeal and by the Circuit Court of Appeals returned to this court.

H. B. Anderson, Judge.

Dated this Dec. 16, 1932.

[fol. 617] In United States District Court

Order Extending Time for Preparation of Appeal, Etc. —Entered Dec. 16, 1932

In this cause, for good and sufficient reasons to the Court appearing, it is ordered by the Court that the time for the preparation and settling of the Record on Appeals, and for filing præcipes or supplemental præcipes, and for complying with the rules relating to appeals, be extended, and the same are hereby extended to and including January 19, 1933.

H. B. Anderson, United States District Judge.

Dated this Dec. 16, 1932.

Citation in usual form, showing service on Lowell W. Taylor, filed Dec. 17, 1932, omitted in printing.

[fol. 618] IN UNITED STATES DISTRICT COURT

ORDER APPROVING NARRATIVE FORM OF TESCIMONY—Entered Jan. 7, 1933. H. B. Anderson, Judge

It is hereby ordered that the narrative of the testimony heretofore approved by this court for the purposes of appeals Nos. 5397 and 5398, heretofore taken to the court of Appeals for the Sixth Circuit, shall be deemed as a correct narrative form of the testimony in this cause, for purposes of appeal allowed the defendant in this cause by order of this court dated December 16, 1932, allowing such appeal, and that such narrative form of testimony become a part of the record on this last mentioned appeal.

January 7, 1933.

[fol. 619] IN UNITED STATES DISTRICT COURT

ORDER EXTENDING TIME TO COMPLETE TRANSCRIPT ON APPEAL —Entered January 16, 1933. H. B. Anderson, Judge

In this case, it appearing to the court that additional time is necessary in which to complete the transcript of record and proceedings had herein, and for filing same in the United States Circuit Court of Appeals, for this, the Sixth Judicial Circuit;

It is, therefore, hereby ordered by this court that the time be and is extended thirty days from this date for completing and filing same in the United States Circuit Court of Appeals for the Sixth Circuit; and the same additional time is allowed the appellants within which to make the deposit of $45.00 required by Rule 16 of said Appellate Court.

IN UNITED STATES DISTRICT COURT

DEFENDANT'S PRÆCIPE FOR RECORD ON APPEAL—Filed Jan 7, 1933

To the Clerk of the Said Court:

Please prepare and certify a Record on Appeal, in the above entitled cause, to be filed in the United States Circuit

Court of Appeals for the Sixth Circuit, in the appeal allowed the defendant in the above cause on December 16, 1932, and include in such Record on Appeal the following papers, pleadings, depositions, documents and exhibits:

(A) All the papers, pleadings, depositions, documents, and exhibits which formed a part of the record on appeals Nos. 5397 and 5398, to the Court of Appeals for the Sixth Circuit, entitled Hollingshead vs. Bassick, and Bassick vs. Hollingshead, respectively. Printed copy of Record on Former Appeal, marked X, is now handed you.

(B) Mandate of the Court of Appeals for the Sixth Cir-
[fol. 620] cuit, in the case entitled Hollingshead vs. Bassick, Appeal No. 5397, filed in this Court on January 19, 1932.

(C) Mandate of the Sixth Circuit Court of Appeals, in the case of Bassick vs. Hollingshead, Appeal No. 5398, filed in this Court on January 19, 1932.

(D) Defendant's Motion for entry of order in conformity with the Mandate of the Court of Appeals for the Sixth Circuit (filed September 23, 1932), including:

(1) Order proposed by defendant on Mandate of the Court of Appeals;

(2) Amendment to Answer, proposed by defendant;

(3) Interrogatories proposed by defendant.

(E) Affidavit of Leonard L. Kalish, filed November 19, 1932, in support of defendant's motions, filed September 23, 1932.

(F) Order of the District Court entered Novemeber 19, 1932, disallowing and denying defendant's motions.

(G) Findings of Fact, as proposed by defendant on November 19, 1932.

(H) Report of the Court Reporter, of the proceedings before the District Court on November 19, 1932.

(I) Decree of the District Court entered November 19, 1932.

(J) Findings of Fact and Conclusions of Law filed by the District Court on November 19, 1932.

(K) Petition for Appeal, filed December 16, 1932.

(L) Order allowing appeal, filed December 16, 1932.

(M) Bond on appeal, filed December 16, 1932.

(N) Citation on appeal, filed December 17, 1932.

(O) Order Respecting Record on Appeal, dated December 16, 1932.

(P) Order extending time (to January 9, 1933) for settling record on appeal, dated December 16, 1932.

(Q) Order approving narrative form of testimony, dated January 7, 1933.

(R) Copies of patents cited in amendment to answer proposed by defendant, filed September 23, 1932.

(S) Præcipe for Record on Appeal.

The foregoing item (H) need not be printed and may be transmitted as a physical exhibit.

Leonard L. Kalish, Burch, Minor & McKay, Solicitors and Counsel for Defendant.

January 7, 1933.

Approved January 7, 1933.
H. B. Anderson,
U. S. District Judge.

[fol. 621] Clerk's Certificate to foregoing transcript omitted in printing.

[fol. 622] Minute entry of argument and submission, Oct. 3, 1933, omitted in printing.

In United States Circuit Court of Appeals, Sixth Circuit

Order Setting Case for Re-Argument—Filed Feb. 16, 1934

It is ordered that this cause be specially set for re-argument on the 6 day of March, 1934.

[fols. 623 & 624] Minute entry of re-argument and submission, March 6, 1934, omitted in printing.

In United States Circuit Court of Appeals

Decree—Filed Nov. 14, 1934

Appeal from the District Court of the United States for the Western District of Tennessee.

This cause came on to be heard on the transcript of the record from the District Court of the United States for the Western District of Tennessee, and was argued by counsel.

On consideration whereof, it is now here ordered, adjudged and decreed by this Court that the decree of the said District Court in this cause be and the same is hereby reversed and the cause remanded for further proceedings consistent with the opinion of this court.

[fol. 625] [File endorsement omitted]

IN UNITED STATES CIRCUIT COURT OF APPEALS, SIXTH CIRCUIT

No. 6419

(Decided November 14, 1934)

THE R. M. HOLLINGSHEAD COMPANY, Defendant-Appellant,

v.

THE BASSICK MANUFACTURING COMPANY, Plaintiff-Appellee

Appeal from the District Court of the United States for the Western District of Tennessee

Before Moorman and Simons, Circuit Judges, and Raymond, District Judge

OPINION—Filed Nov. 14, 1934

RAYMOND, District Judge:

This appeal involves the validity and infringement of claims 1, 2, 3, 4, 5, 6, 8, 10, 14 and 15 of Gullborg patent 1,307,734, issued June 24, 1919, for "lubricating means"; and of claims 2, 3 and 5 of Zerk patent 1,475,980, issued December 4, 1923, for "lubricating apparatus."

An appeal to this court from an order confirming a special master's report upon collateral issues and making permanent a preliminary injunction, but without determination of fundamental issues of validity and infringement, was dismissed. See R. M. Hollingshead Co. v. Bassick Mfg. Co., 50 F. (2d) 592; and R. M. Hollingshead Co. v. Bassick Mfg. Co., 53 F. (2d) 470. The cause was then submitted to the district court upon the record made prior to

the first appeal. This resulted in a decree that the sale of compressors and couplers of the type exemplified in Exhibit A filed with the affidavit of Beezley, and a similarly designated exhibit filed with the affidavit of Cumming, constituted infringement of the several claims of the Gullborg patent above enumerated, and, as to Zerk, that the sale of [fol. 626] such compressors and Zerk adapters shown in Exhibit A filed with the affidavit of Cumming, was an infringement of the three claims of the patent here in controversy.

Many other occasions for consideration of these patents have arisen. In the case of Lyman Mfg. Co. v. Bassick Mfg. Co., 18 F. (2d) 29 (C. C. A. 6), the Gullborg patent was held valid as to claims 1, 2, 3, 4, 7, 8, 14 and 15, and invalid as to claim 12. In the case of Larkin Automotive Parts Co. v. Bassick Mfg. Co., 19 F. (2d) 944 (C. C. A. 7), claims 1, 2 and 6 of Gullborg and claims 2, 3 and 5 of Zerk were held valid and infringed. Discussion of one or both of these patents is also found in the following cases: Bassick Mfg. Co. v. C. P. Rogers & Co., Inc., 26 F. (2d) 724 (D. C.); Bassick Mfg. Co. v. Adams Grease Gun Corporation, 39 F. (2d) 904 (D. C.); Bassick Mfg. Co. v. United Grease Gun Corporation, 40 F. (2d) 549 (D. C.); Bassick Mfg. Co. v. Adams Grease Gun Corporation, 52 F. (2d) 36 (C. C. A. 2); Alemite Corporation v. Lubrair Corporation, 62 F. (2d) 899 (C. C. A. 1).

The structures enjoined comprise a grease reservoir, a pump, a hose, and a coupler or nozzle at the free end of the hose adaptable to pin-fittings affixed to the bearings of an automobile or other machinery, to establish a fluid proof connection between the grease dispensing pump and the grease cups or "fittings". Both were of substantially the same type and form, one being known as the "hand" and the other, the larger, as the "service" type, and each was adapted for use in combination with the pin-fitting of the alemite system.

With respect to the Zerk patent, the accused device is a conical contact nozzle adapted to be attached to appellant's compressor units for the purpose of establishing temporary connection with certain "Zerk" type grease cups. Appellant argues that the claims of this patent must be limited to those receptacle elements, the nozzle contact face of which

has a concavely spherical surface, while the nozzle manufactured by appellant has a contact surface which is conical and is adapted to be used with lubricant receptacles well known in the prior art.

Appellant does not make or sell pin fittings. In general, it is its claim that claims 1 to 10, inclusive, of the Gullborg patent are not infringed, because appellant's compressors are not capable of the "suctional" function which was the basis for the finding of validity of claims 1, 2, 3, 4, 7 and 8, in the Lyman case, and for denying validity of claim 12. [fol. 627] Appellant also asserts that claims 14 and 15 are not infringed, or, if held to be infringed, are necessarily invalid for lack of invention, because they should be interpreted to cover only Gullborg's suctional compressor in combination with the specific "pin-fitting" described in the two claims.

Considering first claims 1, 2, 3, 4, 5, 6, 8 and 10 of the Gullborg patent, it is apparent that no infringement exists. The Lyman case definitely recognized that Gullborg's improvement over prior patents was narrowly confined in that it pertained only to the form and resulting functions of Winkley's spring-pressed element for completing the seal. It was there said:

"In place of Winkley's cup, with top and sides complete, Gullborg substituted a cup-shaped perforated washer, which was spring-pressed into sealing contact with the head of the fitting."

The functions gained by this change of form were stated:

"The first was that after the initial sealing was effected by the spring pressure, it was intensified and made more efficient by the pressure developed in the liquid itself. The second was that by reason of the peculiar shape of the sliding member, and after it had been by the pressure of the fitting pushed up a substantial distance, upon the disunion of the parts the spring would throw it sharply down to its position of rest, leaving a vacuum behind it, and an upward inrush of air into this vacuum through the restricted opening would create a suction which would pull up into the opening the grease which at the moment of disunion had been below the opening, and which otherwise woud smear up the parts and impair the cleanliness of operation."

In distinguishing between the validity of the claims sustained and the invalidity of claim 12, it was said:

"So far, therefore, as any claim in Gullborg depends upon this suction result, it is valid; so far as it must rest solely for its novelty upon the pressure produced adhesion, it is invalid. Of the claims in suit, Nos. 1, 2, 3, 4, 7, and 8, by their reference to a perforated sliding disc or cup washer, or means for removing excess lubricant, sufficiently imply dependence upon the construction which will give this [fol. 628] novel suction effect. In claim 12 there is no novelty over Winkley, excepting that the interposed gasket is held against one of the members by the pressure of the lubricant. This claim, for the reasons just stated, is invalid."

Each of the claims here under consideration is limited to a coupler having a suction effect, consisting of a perforated sealing disc slidably mounted, or other equivalent means. The accused device of appellant is the old and well known grease gun or compressor with a coupling means which contains no sliding disc or cup washer or any mechanical means for producing suction effect designed to remove excess lubricant. Such retraction of excess lubricant as was made to appear upon demonstration was slight and was apparently only that commonly incident to the movement of grease upon release of pressure. The accused structures therefore lack the vital element previously found essential for the validity of the several claims relied upon. To give them the breadth of construction necessary to find infringement would be to give to specific improvements in matter of form and structure a scope wholly unwarranted by any precedent.

Claims 14 and 15 of the Gullborg patent were held valid in the Lyman case, but their scope was not there clearly defined. They have since been under consideration by several courts [see Bassick Mfg. Co. v. C. P. Rogers & Co., 26 F. (2d) 724 (D. C.); Bassick Mfg. Co. v. Adams Grease Gun Corporation, 39 F. (2d) 904 (D. C.); Bassick Mfg. Co. v. United Grease Gun Corporation, 40 F. (2d) 549 (D. C.); Bassick Mfg. Co. v. Adams Grease Gun Corporation, 52 F. (2d) 36 (C. C. A. 2); Alemite Corporation v. Lubrair Corporation, 62 F. (2d) 899 (C. C. A. 1)], and different constructions have been placed upon the views expressed in the Lyman case.

This appeal definitely presents the question whether or not, under claims 14 and 15, appellant and the public at large may use grease pumps of the prior art, adapted for connection with the Gullborg "pin-fitting" marketed by appellee under its other Gullborg patent 1,307,733, but devoid of Gullborg's "suction producing" coupling construction. Appellee's contention is that these claims should be given so broad a construction as to protect a monopoly of all compressors which are capable of connection with its alemite pin-fittings, regardless of whether those compressors include the suctional feature.

[fol. 629] It is not claimed that appellant has ever made or sold the alleged combination of compressor and grease cup. Nor is it claimed that it has made or sold the pin-fitting or grease cup described in claims 14 and 15 and protected by Gullborg patent 1,307,733. Appellant asserts only a right to make and sell prior art compressors not having the suction effect but adapted to be applied to any grease cups or fittings. It sells merely an unpatented non-suctional compressor. Appellee charges contributory infringement.

Claims 14 and 15 are not materially different. Claim 15 reads:

"15. The combination with a grease cup comprising a tubular member having a closure seat, a closure, a pin extending through said tubular member and from both sides thereof, and a spring confined between said pin and closure, and tending to hold said closure on its seat, of a grease pump having a discharge conduit, and means co-acting with the ends of said pin for detachably connecting the discharge end of said conduit with said grease cup."

The grease pump element of the combination, if construed literally, would clearly embrace any construction of grease gun or compressor whether with or without the "suctional effect." Appellee has sold several hundred millions of the pin-fittings, and the inescapable consequence of acceptance of its contentions would be to establish for it a practical monopoly of the business of making and selling compressors, both patented and unpatented, for supplying grease to automobiles.

Determination of patentability of a combination of old elements turns upon whether the combination produces,

through joint action of the elements, either a novel and useful result, or an old result in a more advantageous way. The problem is to ascertain what, if any, new cooperative function has been evolved. [See Hailes v. Van Wormer, 87 U. S. 353; Palmer v. Corning, 156 U. S. 342; Office Specialty Mfg. Co. v. Fenton, 174 U. S. 492; Grinnell Washing Machine Co. v. Johnson, 247 U. S. 426; Radio Corporation v. Dubilier Condenser Corporation, 59 F. (2d) 309 (C. C. A. 3).] Because of the necessity of ascertainment of this requisite joint or cooperative function if a patent is to be sustained, the duty rests upon the patentee to clearly and fully disclose the precise elements of the combination [fol. 630] upon which he seeks a monopoly. He is required to particularly point out and distinctly claim each of the elements which is a part of the combination.

The second major element of the claims under consideration includes.

"means co-acting with the ends of said pin for detachably connecting the discharge end of said conduit with said grease cup."

The all inclusive generality and baffling obscurity of this element preclude attempts to determine the presence of cooperative function, and it is only by reference to the drawings and specifications that the language can be accorded any specific meaning.

Claims must be interpreted in the light of specifications as though the words "substantially as described" were incorporated in each claim and should be limited to this contribution, which is the invention disclosed by the patent. Radio Corporation of America v. Twentieth Century R. Corp., 19 F. (2d) 290 (C. C. A. 2); International Banding Machine Co. v. American Bander Co., 9 F. (2d) 606 (C. C. A. 2); Tompkins-Hawley-Fuller Co. v. Holden, 273 F. 424 (C. C. A. 2); Fowler & Wolfe Mfg. Co. v. McCrum-Howell Co., 215 F. 905 (C. C. A. 2).

See also National Tube Co. v. Marks, 216 F. 507, 515 (C. C. A. —).

It is significant that neither the drawings nor the specifications afford any basis for liberal construction of the word "means." The only "means" illustrated or referred to are those which include as a novel feature a perforated sealing disc slidably mounted to reciprocate in the bore of

the coupling member. The six objects of the invention are stated to be:

1st. To provide novel means for supplying a lubricant under pressure to the parts of an apparatus to be lubricated, the said means comprising a grease pump or gun and means for detachably connecting the discharge of said grease pump or gun with the part to be lubricated.

2nd. To provide novel coupling means for connecting the grease gun with the parts to be lubricated, the said coupling means being so constructed that when the coupling members are uncoupled or disconnected from each other there will be no excess lubricant on the outer ends of the coupling members.

3rd. To provide novel means for effectively sealing the joint between the coupling members so that the lubricant may be forced between the parts to be lubricated under a very heavy pressure.

[fol. 631] 4th. To provide novel means whereby lubricant may be supplied to parts to which it is difficult to gain access.

5th. To provide novel coupling members to be permanently secured to the parts to be lubricated.

6th. To provide novel means to assist in attaching and and detaching a tubular coupling member to a part to be lubricated.

Nowhere in the specifications is there an indication of an intention to connect a novel pin-fitting with any and all known coupling means. Nor is there any suggestion that greater strength or efficiency would be obtained by such a combination.

It has often been stated that an element described in such general terms as to include every form of the element or device then known is insufficient except when the generic description can properly be interpreted to mean the particular form of the element set forth in the specifications. This necessarily follows from proper application of section 4888 of the Revised Statutes (35 U. S. C. A. sec. 33), which provides that the applicant for a patent shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding

and using it, in full, clear, concise and exact terms, and that he shall particularly point out and distinctly claim the part, improvement or combination which he claims as his invention or discovery. [See Bettendorf Co. v. Ohio Steel Foundry Co., 56 F. (2d) 777 (C. C. A. 6).] In the case of Portland Gold Mining Co. v. Hermann, 160 F. 91, 99 (C. C. A. 8), it was said:

"In a combination device consisting in congeries of well known mechanical appliances, no liberality of construction is accorded to it to create a monopoly; but it is limited to the descriptive elements in the combination as expressed in the specifications; and no great liberality of the doctrine of mechanical equivalents can be indulged in its favor. As the applicant for such combination of old devices chooses his own expressions in presenting it, and is required to enumerate the elements of his claim, he is limited to the combined apparatus as specified. And no one is an infringer of a combination claim unless he uses the elements thereof, and in substantially the same mode of co-operation."

[fol. 632] And in the case of American Can Co. v. Hickmott Asparagus Canning Co., 142 F. 141, 146 (C. C. A. 9), we find the following:

"The question arises whether infringement is thereby avoided. The appellees contend that the words in the claim 'means for interlocking the hooks on the blank' are limited by the words which immediately follow, 'substantially as specified.' But those words refer to the whole claim, and import nothing into it not already there, either to narrow it, so as to escape anticipation, or to broaden it, so as to establish infringement. The words mean "substantially as specified in regard to the combination which is the subject of the claim.' Lake Shore R. R. Co. v. Car-Brake Shoe Co., 110 U. S. 229, 4 Sup. Ct. 33, 28 L. Ed. 129. Of course, an inventor cannot by the mere use of the word 'means,' in reference to the accomplishment of a designated function in a combination claim, appropriate any and all kinds of mechanism or devices which may perform the specified function, or any other mechanism or device than that which is described in the patent or which is its equivalent. Reference must be had to the specifications to ascertain the

means which are made an element of the claim and are protected by the patent. Dudley E. Jones v. Munger Imp. C. Machine Mfg. Co., 49 Fed. 61, (1 C. C. A. 158); Williams v. Steam Gauge & Lantern Co. (C. C.), 47 Fed. 322."

The exact question is the proper interpretation to be given to the word "means" and the language immediately following. A similar question arose in the case of Dudley E. Jones v. Munger Improved Cotton Machine Mfg. Co., 49 F. 61, 65 (C. C. A. 5), wherein one of the elements of the combination of the claim being considered was "means for delivering the cotton from the conveyer to the gin." The court said:

"It is true that the claims must be construed according to the language of each, but specifications and designs may be referred to to limit or explain, if not to enlarge. Can we consider that the patent of complainant may be held to cover any and every means that might possibly be used to convey the cotton from the exhaust chamber to the gin, or must it be limited to the actual means claimed, described, or suggested in the specifications? This is, as has [fol. 633] been herein decided, a patent for a combination, and each and every element of such combination must be used as patented, or the entire result is changed, and the machine sought to be held as infringing is a different one. In Vance v. Campbell, 1 Black 427, the court say-:

'Unless the combination is maintained, the whole of the invention fails. The combination is an entirety. If one of the elements is given up, the thing claimed disappears."

In determining what the combination is, for which letters patent have been granted, the entire designs, specifications, and claims may be considered. It is this special combination which has been held to be patentable on account of its producing a new and useful result; and, should it be held that this patent could cover every means that could be used for this function, there might be a new and other combination which would be valuable and useful, yet would be covered by these letters patent."

The rule is, therefore, that the scope of a patent upon a combination should be limited to the specific devices described or their mechanical equivalents. Applying these

principles to claims 14 and 15, it must be held that the interpretation of the words "means co-acting with the ends of said pin for detachably connecting the discharge end of said conduit with said grease cup" should be in the light of the drawings and specifications. Nowhere in the specifications is there found a description of any other co-acting means than the hollow coupling member described in line 109, page 1, to line 18, page 2, of the patent, which read:

"* * * a hollow coupling member, indicated in general by the reference character 21. The free end of this coupling member, as shown in Fig. 2, is provided with a bayonet slot 22, the transverse portion 23 of which is included from the inner end of the longitudinal portion of the slot toward the outer end of the coupling member for a purpose which will be referred to later on. The bore of the coupling member is enlarged at 24 to provide an annular shoulder 25. A perforated cup leather or sealing disk 26 is slidably mounted in the annular portion 24 of the bore of the coupling and is urged against the shoulder 25 by means of a coiled spring [fol. 634] 27, one end of which abuts against the cup leather or sealing disk 26 and the other end of which abuts against the adjacent end 28 of the conduit 19. This end of the conduit may be soldered or secured in any convenient manner to the coupling member."

The co-action between the grease cup and coupling member is described in lines 47 to 84, page 2 of the patent. No alternative means is shown in the drawings or described or referred to in the specifications.

The word "means" which introduces the second element of claims 14 and 15 admits of no more than two possible constructions. It must either signify only the "novel means" several times referred to in the description and disclosed by the drawings, or include all possible means, patented or unpatented, then in existence or discovered during the life of the patent, for making the connection between a grease pump and the pin-fitting covered by the patent, Gullborg 1,307,733. Externally, the pin-fitting is the same as those in common use with bayonet couplings prior to this patent. Its novelty is claimed to reside in increased strength and economy of manufacture effected by the extension of the projecting "arms" entirely through the fitting,

and the resulting provision for support of the spring which actuates the closure. It is the view of the court that these advantages may be claimed only where the pin-fitting described is used in combination with couplers having the novel suction effect.

In view of the limited scope of the invention, this interpretation of the word "means" as used in these claims is within the principles announced in Davis Sewing Mach. Co. v. New Departure Mfg. Co., 217 F. 775, 782 (C. C. A. 6).

Counsel for appellee in apparent recognition of the inadequacy of the drawings and specifications of Gullborg 1,307,734 to meet the exactions of sec. 4888, urge that reference should be made to Gullborg 1,307,733 and that claims 14 and 15 are to be interpreted in the light of the drawings and specifications of that patent which shows only the non-suction effect coupler. To support this contention, the case of In re Tully, 12 F. (2d) 624 (App. D. C.), is cited, where it was said:

"It is familiar law that this claim must be given an interpretation consistent with the application in which it originated."

The issue in that case, however, involved the allowance or rejection of claims pending in the patent office where different rules clearly apply. No case is found where, in an effort to interpret the word "means" as an element of a patent upon a combination, reference has been permitted [fol. 635] to another patent upon one of the elements for interpretation of that word.

It is the conclusion of the court that claims 14 and 15 are valid only if the word "means" is limited by construction in the light of the drawings and specifications to a coupling member embracing mechanical means designed to produce a suction effect for the purpose of removing excess lubricant. Appellant's structure therefore does not infringe these claims.

The discussion in the Lyman case of the validity of these claims was limited to the following paragraph:

"We see no reason for denying the patentable novelty of Gullborg's particular form of fitting, by reason of which it has come to be called a pin fitting, and by which the same pin which furnished bearings for the slot was made to pass through the fitting and furnish an abutment for the

valve closing spring; *but it is only this complete combination that can be patentable.*''

The italicized words obviously refer to a specific combination. There was no discussion of the validity of the claims considered in the scope here urged by appellee, and the case is not open to construction contrary to the view here expressed. It is our conclusion, therefore, that the case is not to be regarded as authority for appellee's contention.

With reference to claims 2, 3 and 5 of the Zerk patent, it is important to observe that each contains a limitation as to form which denies the right to generic construction. These claims were sustained in the case of Larkin Automotive Parts Co. v. Bassick Mfg. Co., 19 F. (2d) 944 (C. C. A. 7), upon the asserted novelty of the concavely spherical surface of the nozzle and the dirt-cutting circumferential edged part adapted to be embraced within the spherical surface of the nozzle. The principle applicable to claims specific as to matters of form, structure and function is stated in the case of D'Arcey Spring Co. v. Marshall Ventilated Mattress Co., 259 F. 236, 240 (C. C. A. 6), as follows:

"* * * where the claim defines an element in terms of its form, material, location or function, thereby apparently creating an express limitation, where that limitation pertains to the inventive step rather than to its mere environment, and where it imports a substantial function which the patentee considered of importance to his invention, the [fol. 636] court cannot be permitted to say that other forms, which the inventor thus declared not equivalent to what he claimed as his invention, are nevertheless to be treated as equivalent, even though the court may conclude that his actual invention was of a scope which would have permitted the broader equivalency."

In each of the three claims relied upon, the patentee has expressly limited himself to a structure embodying a "nozzle contact surface having a concavely spherical surface." The appellant's coupler complained of has a conical surface, that is, the contact face is in shape a truncated cone. The main object of the Zerk invention was stated to reside in relieving the operator performing the several operations involved in greasing automobiles from assuming

awkward positions, the nozzle contact face being adapted to be pressed against that of the pin-fitting from any one of a number of different angular directions, at the same time maintaining a tight lubricant proof contact between the circular edge of one contact face and the spherical surface of the other contact face which engages it. The specific form adopted renders it unnecessary to hold the coupler and pin-fitting in precise alignment. Whether or not the description of appellant's device as a truncated cone is meticulously accurate is not important. It is obvious that upon the contact surface thereof there is no substantially spherical concave element within the meaning of that description in the patent. The claims relied upon are entitled only to a very narrow range of equivalents and cannot be found to be infringed by a nozzle the form of which is such that it does not make a sealed connection between the face openings unless it is held in an approximately vertical position. Appellant's structure makes complete contact only when the axis of the cone is substantially perpendicular to the plane of the circle. It is elementary that one thing to be the equivalent of another must perform the same functions. It follows that the two nozzles cannot be held to be mechanical equivalents. Among desirable results claimed by the patentee is the claim that:

"A leak proof connection is maintained between the rim or edge 16 of the nipple contact face and the spherical contact face of the nozzle by the manual pressure exerted toward the nipple upon the handle. This is true, even though the angle from which the nozzle is presented to the nipple is varied widely, the nipple circular edge making a [fols. 637 & 638] tight joint with the nozzle spherical face 15 in all cases, so long as they are pressed together, and when so pressed together complete a closed conduit or passage-way for lubricant under high pressure passing from the gun nozzle to the interior of the nipple."

Appellant's device, when held by the operator from different angular directions, is clearly not adapted to maintain lubricant proof contact between the adjacent surfaces.

It is the conclusion of the court that appellant's device differs materially in function, this difference arising from the fact that there is no substantially "spherically con-

cave'' element in appellant's structure. Infringement is therefore not present.

The decree of the district court is reversed and the cause remanded for the entry of a new decree in accordance herewith.

[fols. 639-641] [File endorsement omitted.]

[fol. 642] IN UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SIXTH CIRCUIT

[Title omitted]

APPELLEE'S PETITION FOR REHEARING—Filed Dec. 14, 1934

To the Honorable the Judges of this Court:

The appellee herein, The Bassick Manufacturing Company, respectfully petitions this Court to grant a rehearing of this cause, and especially to reconsider certain essential statements and conclusions of the opinion filed herein on the 14th day of November, 1934.*

[fol. 643] As the basis for such rehearing and reconsideration, appellee respectfully submits that the Court, as shown by its opinion herein, erred in the particulars hereinbelow specified:

I

In its opinion the Court said:

"Appellant does not make or sell pin fittings. In general, it is its claim that claims 1 to 10, inclusive, of the Gullborg patent are not infringed, because Appellant's compressors are not capable of the 'suctional' function which was the basis for the finding of alidity of claims 1, 2, 3, 4, 7 and 8 in the Lyman case, and for denying validity of claim 12. * * *

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* The Appellee by the specifications contained in this petition does not intend to waive, but rather still insists upon, each of its contentions heretofore made in the briefs on file, but it particularizes in this petition for a rehearing only those as to which it believes that the Court's conclusions were based upon clear errors in its understanding of the facts.

"Considering first claims 1, 2, 3, 4, 5, 6, 8 and 10 of the Gullborg patent, it is apparent that no infringement exists. * * *

"The accused device of appellant is the old and well known grease gun or compressor with a coupling means which contains no sliding disc or cup washer or any mechanical means for producing suction effect designed to remove excess lubricant. Such retraction of excess lubricant as was made to appear upon demonstration was slight and was apparently only that commonly incident to the movement of grease upon release of pressure. The accused structures therefore lack the vital element previously found essential for the validity of the several claims relied upon. To give them the breadth of construction necessary to find infringement would be to give to specific improvements in matter of form and structure a scope wholly unwarranted by any precedent."

Whereas, the fact is that the defendant sold two different kinds of structures or devices, namely, a compressor or gun exemplified in Exhibit A of the Beezley affidavit, and another compressor or gun exemplified in Exhibit A of the [fol. 644] Cumming affidavit. The first included a "suction effect" coupler. The second included a coupler which was not of the suction type. The exact construction of the suction effect coupler of the compressor which Hollingshead sold to Beezley is shown in the enlarged drawing constituting Exhibit J of the Davis affidavit and Plaintiff's Exhibit 15 at final hearing. This drawing is reproduced on page 373 of the Record herein. It is substantially identical with the suction effect couplers of the compressors uniformly held by other courts, and heretofore uniformly held by this Sixth Circuit Court of Appeals to constitute an infringement of claims 1, 2, 3, 4, 7 and 8 of the Gullborg patent in suit No. 1,307,734.

The fourth paragraph of the decree of the District Court, from which the above appeal was taken, found "that the defendant, The R. M. Hollingshead Company, has infringed claims 1, 2, 3, 4, 5, 6, 8, 10, 14 and 15 of said Gullborg patent No. 1,307,734, and violated the rights of the plaintiff thereunder by the sale of couplers of the type exemplified in Exhibit A submitted with the affidavit of D. A. Beezley of April 12, 1926, and illustrated in the drawing Exhibit J of the affidavit of Ernest W. Davis of October 21, 1926"; where-

upon it was decreed that a writ of injunction issue, restraining Hollingshead from making, using or selling "(a) Compressors of the type exemplified in Exhibit A of the affidavit of D. A. Beezley of April 12, 1926."

Your petitioner respectfully submits that it was error on the part of this Court to find and hold that the device sold by Hollingshead to Beezley was not of the suction type, and that it was not sold in infringement of claims 1, 2, 3, 4, 5, 6, 8 and 10 of the said Gullborg patent 1,307,734.

[fol. 645] II

In its opinion the Court said relative to Zerk patent in suit No. 1,475,980, that:

"Appellant's device, when held by the operator from different angular directions, is clearly not adapted to maintain lubricant-proof contact between the adjacent surfaces.

"It is the conclusion of the Court that Appellant's device differs materially in function, this difference arising from the fact that there is no substantially 'spherically concave' element in Appellant's structure. Infringement is therefore not present."

Whereas, the fact is that the appellant's device, when applied by the operator from different angular directions, does maintain lubricant-proof contact between the adjacent surfaces, due to the fact that engaging surface of the nozzle of the appellant's compressor is substantially spherically concave.

Your petitioner respectfully submits that the Court, as shown by its opinion herein, erred in holding that:

"The appellant's coupler complained of has a conical surface, that is, the contact face is in shape a truncated cone."

and not a substantially spherically concave surface, and that it is not an infringement of claims 2, 3 and 5 of the Zerk patent in suit.

Wherefore, and for other reasons appearing in petitioner's brief in support of this petition, petitioner respectfully urges that a rehearing may be granted, and that the man-

date of this Court may be stayed pending the disposition of this petition.

Respectfully submitted, The Bassick Manufacturing Company, Plaintiff-Appellee, by Lynn A. Williams, Counsel for Petitioner.

[fols. 646-675] I hereby certify that the above petition is well grounded in law and proper to be filed, and is not interposed for purposes of delay.

Lynn A. Williams, Counsel for Plaintiff-Appellee, The Bassick Manufacturing Company.

Brief in support of petition for rehearing omitted in printing.

[fol. 676] IN UNITED STATES CIRCUIT COURT OF APPEALS

ORDER DENYING PETITION FOR REHEARING—Filed January 14, 1935

The petition for rehearing in this cause is hereby denied.

[fol. 677] Clerk's certificate to foregoing transcript omitted in printing.

SUPREME COURT OF THE UNITED STATES

ORDER ALLOWING CERTIORARI—Filed May 20, 1935

The petition for a writ or certiorari to the United States Circuit Court of Appeals for the Sixth Circuit is granted. And it is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.

The Chief Justice took no part in the consideration or decision of this application.